



START2

Superfund Technical Assessment and Response Team 2 -
Region VIII



United States
Environmental Protection Agency

Contract No. 68-W-00-118

ANALYTICAL RESULTS REPORT for FOCUSED SITE INSPECTION

RICO-ARGENTINE
Rico, Dolores County, Colorado

TDD No. 0308-0013

APPENDIX B

JANUARY 16, 2004



URS
OPERATING SERVICES, INC.

In association with: Tetra Tech EM, Inc.
URS Corporation
LT Environmental, Inc.
TN & Associates, Inc.
TechLaw, Inc.

**REGION VIII
DATA VALIDATION REPORT
INORGANIC**

TDD No.	Site Name	Operable Unit	
0308-0013	Rico Argentine		
RPM/OSC Name			
Luke Chavez			
Contractor Laboratory	Contract No.	SDG No.	Laboratory DPO/Region
Paragon Analytics, Inc.	NA	0310177	

Review Assigned Date November 13, 2003 Data Validator Mark McDaniel
 Review Completion Date December 01, 2003

Station Number	Laboratory ID	Matrix	Analysis
RA-GW-02	0310177-1	Water	Total metals by SW-846 methods 6010B and 7470A. Total cyanide by SW-846 method 9014.
RA-GW-03	0310177-2		
RA-GW-04	0310177-3		
RA-GW-05	0310177-4		
RA-SO-08	0310177-5		
RA-SW-02	0310177-6		
RA-SW-07	0310177-7		
RA-SW-08	0310177-8		
RA-GW-02	0310177-9		Dissolved metals by SW-846 methods 6010B and 7470A.
RA-GW-03	0310177-10		
RA-GW-04	0310177-11		
RA-GW-05	0310177-12		
RA-SO-08	0310177-13		
RA-SW-02	0310177-14		

UOS

URS Operating Services, Inc.

Data Validation Report

Station Number	Laboratory ID	Matrix	Analysis
RA-SW-07	0310177-15	Water	Dissolved metals by SW-846 method 6010B and 7470A.
RA-SW-08	0310177-16		

DATA QUALITY STATEMENT

- () Data are ACCEPTABLE according to EPA Functional guidelines with no qualifiers (flags) added by the reviewer.
- () Data are UNACCEPTABLE according to EPA Functional Guidelines.
- (X) Data are acceptable with QUALIFICATIONS noted in review.

Telephone/Communication Logs Enclosed? Yes _____ No X

TPO Attention Required? Yes _____ No X If yes, list the items that require attention:

INORGANIC DATA QUALITY ASSURANCE REVIEW

REVIEW NARRATIVE SUMMARY

This data package was reviewed according to "USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Data Review," February 1994, modified for the methods used.

Raw data were reviewed for completeness and transcription accuracy onto the summary forms. Approximately 10-20% of the results reported in each of the samples, calibrations, and QC analyses were recalculated and verified. If problems were identified during the recalculation of results, a more thorough calculation check was performed.

SDG No. 0310177 consisted of 16 water samples for total recoverable or dissolved metals by 6010B and 7470A, as well as total cyanide by 9014.

The following table lists the data qualifiers added to the sample analyses. Please see Data Qualifier Definitions, attached to the end of this report.

Sample ID	Elements	Qualifiers	Reason for Qualification	Review Section
RA-GW-02 RA-GW-03 RA-GW-04 RA-GW-05 RA-SO-08 RA-SW-02 RA-SW-07 RA-SW-08	Fe (Total and Dissolved)	J/UJ	MSD recovery=142% RPD = 39%	IX
RA-GW-03 RA-GW-04	CN	UJ	pH = 10, no hits, all QC in control.	II

Method/SOW Number 6010B, 7470A, 9014

Revision _____

Inorganic Deliverables Completeness Checklist

- P Inorganic Cover Page
- P Inorganic Analysis Data Sheets
- P Initial Calibration and Calibration Verification Results
- P Continuing Calibration Verification Results
- P CRDL Standard for ICP and AA
- P Blank Analysis Results
- P ICP Interference Check Sample Results
- P Spiked Sample Results
- P Post-digest Spiked Sample Analysis
- R Duplicate Sample Results
- NP Instrument Detection Limits
- P Laboratory Control Sample Results
- P Standard Addition Results
- P ICP Serial Dilution Results
- NA Holding Times Summary Sheet
- P ICP Interelement Correction Factors
- P ICP Linear Ranges
- P Raw Data
 - P Samples P Calibration Standards
 - P Duplicates NA ICP QC (ICS and Serial Dilution)
 - NA Cr6 P Mercury Analysis
- P Percent Solids Calculations - Solids Only
- P Sample Prep/Digestion Logs (Form XIII)
- P Analysis Run Log (Form XIV)
- P Chain-of-Custody
- P Sample Description
- P Case Narrative
- P Method References

- P Blanks P Spikes
- P LCS
- P Cyanide Analysis

KEY:

- P** = Provided in original data package, as required by the SOW
- R** = Provided as Resubmission
- NP** = Not provided in original data package or as resubmission
- NR** = Not required under the SOW
- NA** = Not applicable to this data package or analysis

I. DELIVERABLES

All deliverables were present as specified in the Statement of Work.

Yes No

Comments: The laboratory provided QA/QC summary reports, however, these summary reports are not considered CLP equivalent forms.

II. HOLDING TIMES AND PRESERVATION CRITERIA

All holding times and preservation criteria were met.

Yes No

Comments: Temperature of samples upon receipt was 16°C. The preservation requirements are 4°C(±2°C). The pH of all water samples was < 2, thus no qualifications are necessary.

All cyanide samples were pH>12 except RA-GW-03 and RA-GW-04, which both had a pH = 10. Samples RA-GW-03 and RA-GW-04 were qualified with "UF".

III. INSTRUMENT CALIBRATIONS: STANDARDS AND BLANKS

Initial instrument calibrations were performed according to requirements.

Yes No

Comments: None.

The instruments were calibrated daily and each time an analysis run was performed.

Yes No

Comments: None.

The instruments were calibrated using one blank and the appropriate number of standards.

Yes No

Comments: None.

IV. FORM 1 - SAMPLE ANALYSIS RESULTS

Sample analyses were entered correctly on Form Is.

Yes X No ___

Comments: None.

V. FORM 2A - INITIAL AND CONTINUING CALIBRATION VERIFICATION

The initial and continuing calibration verification standards (ICV and CCV, respectively) met requirements.

Yes X No ___

Comments: None.

The calibration verification results were within 90-110% recovery for metals, 80-120% for mercury, and 85-115% for cyanide.

Yes X No ___

Comments: None.

The continuing calibration standards were run at 10% frequency.

Yes X No ___

Comments: Continuing calibration blanks were run every 10 samples.

VI. FORM 2B - CRDL STANDARD FOR ICP AND AA

ICP Analysis: Standards (CRI) at two times the CRDL or the IDL (whichever were greater) were analyzed at the beginning and the end of each sample run.

Yes X No ___ NA ___

Comments: None.

GFAA Analysis: Standards (CRA) at two times CRDL were analyzed at the beginning of each sample run.

Yes___ No___ NA X

Comments: Samples were not analyzed by GFAA.

The CRI and/or the CRA were analyzed after the ICV.

Yes___ No X

Comments: None.

VII. FORM 3 - BLANKS

The initial and continuing calibration blanks (ICB and CCB, respectively) met requirements.

Yes X No___

Comments: None.

The continuing calibration blanks were run at 10% frequency.

Yes X No___

Comments: Continuing calibration blanks were run every 10 samples.

A laboratory/preparation blank was run at the frequency of one per twenty samples, or per sample delivery group (whichever is more frequent), and for each matrix analyzed.

Yes X No___

Comments: None.

All analyzed blanks were free of contamination.

Yes X No___

Comments: None.

VIII. FORM 4 - ICP INTERFERENCE CHECK SAMPLE

The ICP interference check sample (ICS) was run twice per eight hour shift and/or at the beginning and end of each sample set analysis sequence (whichever is more frequent).

Yes X No ___ NA ___

Comments: None.

Percent recovery of the analytes in solution ICSAB were within the range of 80-120%.

Yes X No ___ NA ___

Comments: Potassium, and sodium were not included in the ICSAB analysis and were therefore not evaluated.

IX. FORM 5A - MATRIX SPIKE SAMPLE ANALYSIS

A matrix spike sample was analyzed with every twenty or fewer samples of a similar matrix, or one per sample delivery group (whichever is more frequent).

Yes X No ___

Comments: None.

The percent recoveries (%R) were calculated correctly.

$$\% \text{ Recovery} = \frac{(SSR - SR)}{SA} \times 100$$

SSR = spiked sample result
 SR = sample result
 SA = spike added

Yes X No ___

Comments: None.

Spike recoveries were within the range of 75-125% (an exception is granted where the sample concentration is four times the spike concentration).

Yes ___ No X

Comments: The following table details MS/MSD failure for iron:

Element	Spike Recovery	Matrix	Samples Affected	Qualifiers
Fe	MSD = 142%	Soil	All	J/UJ

Element	Spike RPD	Matrix	Samples Affected	Qualifiers
Fe	RPD = 39%	Soil	All	J/UJ

X. FORM 5B - POST DIGEST SPIKE RECOVERY

A post-digest spike was performed for those elements that did not meet the specified criteria (i.e., Pre-digestion/pre-distillation spike recovery falls outside of control limits and sample result is less than four times the spike amount added.).

Yes X No ___ Not Required ___

Comments: None.

XI. FORM 6 - DUPLICATE SAMPLE ANALYSIS

Duplicate sample analysis was performed with every twenty or fewer samples of a similar matrix, or one per sample delivery group (whichever is more frequent).

Yes X No ___

Comments: None.

The RPDs were calculated correctly.

$$RPD = \frac{(S - D)}{(S + D)/2} \times 100$$

S = sample
D = duplicate

Yes X No ___

Comments: None.

For sample concentrations greater than five times the CRDL, RPDs were within ±20% (limits of ±35% apply for soil/sediments/tailings samples).

Yes X No ___

Comments: None

For sample concentrations less than five times the CRDL, duplicate analysis results were within the control window of \pm CRDL (two times CRDL for soils).

Yes X No ___

Comments: None.

XII. GFAA QC

Duplicate injections were performed on all GFAA samples and the RSD was within \pm 20%.

Yes ___ No ___ NA X

Comments: GFAA analyses were not performed on these samples.

Analytical spikes were performed on all GFAA samples and the percent recovery was 85 - 115%.

Yes ___ No ___ NA X

Comments: None.

MSAs were analyzed when required and the correlation coefficient was > 0.995 .

Yes ___ No ___ NA X

Comments: None.

XIII. FORM 7 - LABORATORY CONTROL SAMPLE

The laboratory control sample (LCS) was prepared and analyzed with every twenty or fewer samples of a similar matrix, or one per sample delivery group (whichever is more frequent).

Yes X No ___

Comments: None.

All results were within control limits.

Yes X No ___

Comments: None.

XIV. FORM 8 - STANDARD ADDITION RESULTS

Results from graphite furnace standard additions were entered on Form VIII as directed in the method.

Yes___ No___ NA X

Comments: None.

XV. FORM 9 - ICP QC

A serial dilution was performed for ICP analysis with every twenty or fewer samples of a similar matrix, or one per sample delivery group, whichever is more frequent.

Yes X No___ NA___

Comments: None.

The serial dilution was without interference problems.

Yes X No___ NA___

Comments: None.

XVI. FORM 10 - QUARTERLY INSTRUMENT DETECTION LIMITS (IDL)

IDLs were provided for all elements on the target analyte list.

Yes___ No X

Comments: IDLs and MDLs were not provided.

Reported IDLs met requirements.

Yes___ No X

Comments: Form 10 equivalent was not provided.

XVII. FORM 11 - INTERELEMENT CORRECTION FACTORS FOR ICP.

Interelement corrections for ICP were reported.

Yes X No___ NA___

Comments: None.

XVIII. FORM 12 - ICP LINEAR RANGES

ICP linear ranges were reported.

Yes X No ___ NA ___

Comments: None.

XIX. LINEAR RANGE VERIFICATION ANALYSIS

Linear Range Verification Analysis (LRA) was performed and results were within control limits of $\pm 5\%$ of the true value.

Yes ___ No ___ NA X

Comments: None.

XX. FORM 13 - PREPARATION LOG

Information on the preparation of samples for analysis was reported on Form XIII.

Yes X No ___

Comments: None.

XXI. FORM 14 - ANALYSIS RUN LOG

A Form XIV with the required information was filled out for each analysis run in the data package.

Yes X No ___

Comments: None.

XXII. Additional Comments or Problems/Resolutions Not Addressed Above

Yes ___ No X

Comments: None.

INORGANIC DATA QUALITY ASSURANCE REVIEW**Region VIII****DATA QUALIFIER DEFINITIONS**

For the purpose of Data Validation, the following code letters and associated definitions are provided for use by the data validator to summarize the data quality. Use of additional qualifiers should be carefully considered. Definitions for all qualifiers used should be provided with each report.

GENERAL QUALIFIERS for use with both INORGANIC and ORGANIC DATA

- R** - Reported value is "rejected." Resampling or reanalysis may be necessary to verify the presence or absence of the compound.
- J** - The associated numerical value is an estimated quantity because the Quality Control criteria were not met.
- UJ** - The reported amount is estimated because Quality Control criteria were not met. Element or compound was not detected.
- NJ** - The analysis indicates the presence of an analyte that has been "tentatively identified" and the associated numerical value represents its approximate concentration.
- N** - The analysis indicates the presence of an analyte for which there is presumptive evidence to make a tentative identification.
- U** - The material was analyzed for, but was not-detected above the level of the associated value. The associated value is either the sample quantitation limit or the sample detection limit.

ACRONYMS

AA	Atomic Absorption
Ag	Silver
CCB	Continuing Calibration Blank
CCV	Continuing Calibration Verification
CFR	Code of Federal Regulations
CLP	Contract Laboratory Program
CRA	CRDL standard required for AA
CRDL	Contract Required Detection Limit
CRI	CRDL standard required for ICP
CV	Cold Vapor
EPA	U.S. Environmental Protection Agency
GFAA	Graphite Furnace Atomic Absorption
Hg	Mercury
ICB	Initial Calibration Blank
ICP	Inductively Coupled Plasma
ICS	Interference Check Sample
ICSA	Interference Check Sample (Solution A)
ICSAB	Interference Check Sample (Solution AB)
ICV	Initial Calibration Verification
IDL	Instrument Detection Limit
LCS	Laboratory Control Sample
LRA	Linear Range Verification Analysis
MSA	Method of Standard Additions
PDS	Post Digestion Spike
QC	Quality Control
RPD	Relative Percent Difference
RPM	Regional Project Manager
RSD	Percent Relative Standard Deviation
SA	Spike Added
SAS	Special Analytical Services
SDG	Sample Delivery Group
SOW	Statement of Work
SR	Sample Result
SSR	Spiked Sample Result
TPO	Technical Project Officer

CYANIDE, TOTAL

Method SW9014

Sample Results

Lab Name: Paragon Analytics, Inc.
Client Name: URS Operating Services, Inc.
Client Project ID: Rico Argentina
Work Order Number: 0310177
Reporting Basis: As Received

Final Volume: 50 ml
Matrix: WATER
Result Units: mg/l

Client Sample ID	Lab ID	Date Collected	Date Prepared	Date Analyzed	Percent Moisture	Dilution Factor	Result	Reporting Limit	Flag	Sample Aliquot
RA-GW-02	0310177-1	10/22/2003	10/28/2003	10/28/2003	N/A	1	0.01	0.01	U	50 ml
RA-GW-03	0310177-2	10/19/2003	10/28/2003	10/28/2003	N/A	1	0.01	0.01	NSU	50 ml
RA-GW-04	0310177-3	10/19/2003	10/28/2003	10/28/2003	N/A	1	0.01	0.01	NSU	50 ml
RA-GW-05	0310177-4	10/20/2003	10/28/2003	10/28/2003	N/A	1	0.01	0.01	U	50 ml
RA-SO-08	0310177-5	10/22/2003	10/28/2003	10/28/2003	N/A	1	0.01	0.01	U	50 ml
RA-SW-02	0310177-6	10/22/2003	10/28/2003	10/28/2003	N/A	1	0.01	0.01	U	50 ml
RA-SW-07	0310177-7	10/21/2003	10/28/2003	10/28/2003	N/A	1	0.01	0.01	U	50 ml
RA-SW-08	0310177-8	10/21/2003	10/28/2003	10/28/2003	N/A	1	0.01	0.01	U	50 ml

Comments:

1. ND or U = Not Detected at or above the client requested detection limit.

Data Package ID: CN0310177-1

Date Printed: Friday, October 31, 2003

Paragon Analytics Inc.
LIMS Version: 4.221B

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AM
12/2/03

000012

Total Recoverable ICP Metals

Method SW6010

Sample Results

Lab Name: Paragon Analytics, Inc.

Work Order Number: 0310177

Client Name: URS Operating Services, Inc.

Client Project ID: Rico Argentine

Field ID: RA-GW-02
Lab ID: 0310177-1

Sample Matrix: WATER
% Moisture: N/A
Date Collected: 22-Oct-03
Date Extracted: 29-Oct-03
Date Analyzed: 30-Oct-03

Prep Batch: IP031029-1
QCBatchID: IP031029-1-1
Run ID: IT031030-1A1
Cleanup: NONE
Basis: As Received

Sample Aliquot: 50g
Final Volume: 50g
Result Units: mg/l
Clean DF: 1
File Name: TS31030

CASNO	Target Analyte	Dilution Factor	Result	Reporting Limit	Result Qualifier	EPA Qualifier
7429-90-5	ALUMINUM	1	0.2	0.2	U	
7440-36-0	ANTIMONY	1	0.02	0.02	U	
7440-38-2	ARSENIC	1	0.01	0.01	U	
7440-39-3	BARIUM	1	0.13	0.1		
7440-41-7	BERYLLIUM	1	0.005	0.005	U	
7440-43-9	CADMIUM	1	0.005	0.005	U	
7440-70-2	CALCIUM	1	52	1		
7440-47-3	CHROMIUM	1	0.01	0.01	U	
7440-48-4	COBALT	1	0.01	0.01	U	
7440-50-8	COPPER	1	0.17	0.01		
7439-89-6	IRON	1	0.14	0.1	3	
7439-92-1	LEAD	1	0.0054	0.003		
7439-95-4	MAGNESIUM	1	9.1	1		
7439-98-5	MANGANESE	1	0.012	0.01		
7440-02-0	NICKEL	1	0.02	0.02	U	
7440-09-7	POTASSIUM	1	1	1	U	
7782-49-2	SELENIUM	1	0.005	0.005	U	
7440-22-4	SILVER	1	0.01	0.01	U	
7440-23-5	SODIUM	1	1.2	1		
7440-28-0	THALLIUM	1	0.01	0.01	U	
7440-62-2	VANADIUM	1	0.01	0.01	U	
7440-66-6	ZINC	1	0.09	0.02		

Data Package ID: IT0310177-1

Date Printed: Thursday, November 06, 2003

Paragon Analytics Inc.
LIMS Version: 4.227B

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MAA
12/2/03
000015

Total Recoverable ICP Metals

Method SW6010

Sample Results

Lab Name: Paragon Analytics, Inc.

Work Order Number: 0310177

Client Name: URS Operating Services, Inc.

ClientProject ID: Rico Argentine

Field ID: RA-GW-03
Lab ID: 0310177-2

Sample Matrix: WATER
% Moisture: N/A
Date Collected: 19-Oct-03
Date Extracted: 29-Oct-03
Date Analyzed: 30-Oct-03

Prep Batch: IP031029-1
QCBatchID: IP031029-1-1
Run ID: IT031030-1A1
Cleanup: NONE
Basis: As Received

Sample Allquot: 50g
Final Volume: 50g
Result Units: mg/l
Clean DF: 1
File Name: TS31030

CASNO	Target Analyte	Dilution Factor	Result	Reporting Limit	Result Qualifier	EPA Qualifier
7429-90-5	ALUMINUM	1	0.2	0.2	U	
7440-36-0	ANTIMONY	1	0.02	0.02	U	
7440-38-2	ARSENIC	1	0.037	0.01		
7440-39-3	BARIUM	1	0.1	0.1	U	
7440-41-7	BERYLLIUM	1	0.0056	0.005		
7440-43-9	CADMIUM	1	0.005	0.005	U	
7440-70-2	CALCIUM	2	670	2		
7440-47-3	CHROMIUM	1	0.01	0.01	U	
7440-48-4	COBALT	1	0.01	0.01	U	
7440-50-8	COPPER	1	0.01	0.01	U	
7439-89-6	IRON	1	7.6	0.1	5	
7439-92-1	LEAD	2	0.006	0.006	U	
7439-95-4	MAGNESIUM	1	88	1		
7439-96-5	MANGANESE	1	1	0.01		
7440-02-0	NICKEL	1	0.02	0.02	U	
7440-09-7	POTASSIUM	1	27	1		
7782-49-2	SELENIUM	1	0.005	0.005	U	
7440-22-4	SILVER	1	0.01	0.01	U	
7440-23-5	SODIUM	1	60	1		
7440-28-0	THALLIUM	1	0.01	0.01	U	
7440-62-2	VANADIUM	1	0.01	0.01	U	
7440-66-6	ZINC	1	0.087	0.02		

Data Package ID: IT0310177-1

MM
12/2/03

000016

Total Recoverable ICP Metals

Method SW6010

Sample Results

Lab Name: Paragon Analytics, Inc.

Work Order Number: 0310177

Client Name: URS Operating Services, Inc.

ClientProject ID: Rico Argentine

Field ID: RA-GW-04
Lab ID: 0310177-3

Sample Matrix: WATER
% Moisture: N/A
Date Collected: 19-Oct-03
Date Extracted: 29-Oct-03
Date Analyzed: 30-Oct-03

Prep Batch: IP031029-1
QCBatchID: IP031029-1-1
Run ID: IT031030-1A1
Cleanup: NONE
Basis: As Received

Sample Allquot: 50g
Final Volume: 50g
Result Units: mg/l
Clean DF: 1
File Name: TS31030

CASNO	Target Analyte	Dilution Factor	Result	Reporting Limit	Result Qualifier	EPA Qualifier
7429-90-5	ALUMINUM	1	0.2	0.2	U	
7440-36-0	ANTIMONY	1	0.02	0.02	U	
7440-38-2	ARSENIC	1	0.025	0.01		
7440-39-3	BARIUM	1	0.1	0.1	U	
7440-41-7	BERYLLIUM	1	0.005	0.005	U	
7440-43-9	CADMIUM	1	0.005	0.005	U	
7440-70-2	CALCIUM	2	700	2		
7440-47-3	CHROMIUM	1	0.01	0.01	U	
7440-48-4	COBALT	1	0.01	0.01	U	
7440-50-8	COPPER	1	0.01	0.01	U	
7439-89-6	IRON	1	5.9	0.1	3	
7439-92-1	LEAD	2	0.006	0.006	U	
7439-95-4	MAGNESIUM	1	81	1		
7439-96-5	MANGANESE	1	1.3	0.01		
7440-02-0	NICKEL	1	0.02	0.02	U	
7440-09-7	POTASSIUM	1	26	1		
7782-49-2	SELENIUM	1	0.005	0.005	U	
7440-22-4	SILVER	1	0.01	0.01	U	
7440-23-5	SODIUM	1	60	1		
7440-28-0	THALLIUM	1	0.01	0.01	U	
7440-62-2	VANADIUM	1	0.01	0.01	U	
7440-66-6	ZINC	1	0.041	0.02		

Data Package ID: IT0310177-1

Date Printed: Thursday, November 06, 2003

Paragon Analytics Inc.

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LIMS Version: 4.227B

WA
12/2/03

000017

Total Recoverable ICP Metals

Method SW6010

Sample Results

Lab Name: Paragon Analytics, Inc.

Work Order Number: 0310177

Client Name: URS Operating Services, Inc.

ClientProject ID: Rico Argentine

Field ID: RA-GW-05
Lab ID: 0310177-4

Sample Matrix: WATER
% Moisture: N/A
Date Collected: 20-Oct-03
Date Extracted: 29-Oct-03
Date Analyzed: 30-Oct-03

Prep Batch: IP031029-1
QCBatchID: IP031029-1-1
Run ID: IT031030-1A1
Cleanup: NONE
Basis: As Received

Sample Aliquot: 50g
Final Volume: 50g
Result Units: mg/l
Clean DF: 1
File Name: TS31030

CASNO	Target Analyte	Dilution Factor	Result	Reporting Limit	Result Qualifier	EPA Qualifier
7429-90-5	ALUMINUM	1	0.2	0.2	U	
7440-36-0	ANTIMONY	1	0.02	0.02	U	
7440-38-2	ARSENIC	1	0.01	0.01	U	
7440-39-3	BARIUM	1	0.1	0.1	U	
7440-41-7	BERYLLIUM	1	0.005	0.005	U	
7440-43-9	CADMIUM	1	0.005	0.005	U	
7440-70-2	CALCIUM	1	48	1		
7440-47-3	CHROMIUM	1	0.01	0.01	U	
7440-48-4	COBALT	1	0.01	0.01	U	
7440-50-8	COPPER	1	0.01	0.01	U	
7439-89-6	IRON	1	0.1	0.1	U WS	
7439-92-1	LEAD	1	0.003	0.003	U	
7439-95-4	MAGNESIUM	1	6	1		
7439-96-5	MANGANESE	1	0.15	0.01		
7440-02-0	NICKEL	1	0.02	0.02	U	
7440-09-7	POTASSIUM	1	1	1	U	
7782-49-2	SELENIUM	1	0.005	0.005	U	
7440-22-4	SILVER	1	0.01	0.01	U	
7440-23-5	SODIUM	1	1.9	1		
7440-28-0	THALLIUM	1	0.01	0.01	U	
7440-62-2	VANADIUM	1	0.01	0.01	U	
7440-66-6	ZINC	1	0.02	0.02	U	

Data Package ID: IT0310177-1

MM
12/2/03
000018

Total Recoverable ICP Metals

Method SW6010

Sample Results

Lab Name: Paragon Analytics, Inc.

Work Order Number: 0310177

Client Name: URS Operating Services, Inc.

Client Project ID: Rico Argentine

Field ID: RA-SO-08
Lab ID: 0310177-5

Sample Matrix: WATER
% Moisture: N/A
Date Collected: 22-Oct-03
Date Extracted: 29-Oct-03
Date Analyzed: 30-Oct-03

Prep Batch: IP031029-1
QCBatchID: IP031029-1-1
Run ID: IT031030-1A1
Cleanup: NONE
Basis: As Received

Sample Allquot: 50g
Final Volume: 50g
Result Units: mg/l
Clean DF: 1
File Name: TS31030

CASNO	Target Analyte	Dilution Factor	Result	Reporting Limit	Result Qualifier	EPA Qualifier
7429-90-5	ALUMINUM	1	1	0.2		
7440-36-0	ANTIMONY	1	0.02	0.02	U	
7440-38-2	ARSENIC	1	0.01	0.01	U	
7440-39-3	BARIUM	1	0.1	0.1	U	
7440-41-7	BERYLLIUM	1	0.005	0.005	U	
7440-43-9	CADMIUM	1	0.03	0.005		
7440-70-2	CALCIUM	1	260	1		
7440-47-3	CHROMIUM	1	0.01	0.01	U	
7440-48-4	COBALT	1	0.01	0.01	U	
7440-50-8	COPPER	1	0.3	0.01		
7439-89-6	IRON	1	8.5	0.1	3	
7439-92-1	LEAD	1	0.014	0.003		
7439-95-4	MAGNESIUM	1	20	1		
7439-96-5	MANGANESE	1	2.1	0.01		
7440-02-0	NICKEL	1	0.02	0.02	U	
7440-09-7	POTASSIUM	1	2.3	1		
7782-49-2	SELENIUM	1	0.005	0.005	U	
7440-22-4	SILVER	1	0.01	0.01	U	
7440-23-5	SODIUM	1	11	1		
7440-28-0	THALLIUM	1	0.01	0.01	U	
7440-62-2	VANADIUM	1	0.01	0.01	U	
7440-66-6	ZINC	1	5.4	0.02		

Data Package ID: IT0310177-1

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Total Recoverable ICP Metals

Method SW6010

Sample Results

Lab Name: Paragon Analytics, Inc.

Work Order Number: 0310177

Client Name: URS Operating Services, Inc.

Client/Project ID: Rico Argentine

Field ID: RA-SW-02
Lab ID: 0310177-6

Sample Matrix: WATER
% Moisture: N/A
Date Collected: 22-Oct-03
Date Extracted: 29-Oct-03
Date Analyzed: 30-Oct-03

Prep Batch: IP031029-1
QCBatchID: IP031029-1-1
Run ID: IT031030-1A1
Cleanup: NONE
Basis: As Received

Sample Aliquot: 50g
Final Volume: 50g
Result Units: mg/l
Clean DF: 1
File Name: TS31030

CASNO	Target Analyte	Dilution Factor	Result	Reporting Limit	Result Qualifier	EPA Qualifier
7429-90-5	ALUMINUM	1	0.2	0.2	U	
7440-36-0	ANTIMONY	1	0.02	0.02	U	
7440-38-2	ARSENIC	1	0.01	0.01	U	
7440-39-3	BARIUM	1	0.1	0.1	U	
7440-41-7	BERYLLIUM	1	0.005	0.005	U	
7440-43-9	CADMIUM	1	0.005	0.005	U	
7440-70-2	CALCIUM	1	320	1		
7440-47-3	CHROMIUM	1	0.01	0.01	U	
7440-48-4	COBALT	1	0.01	0.01	U	
7440-50-8	COPPER	1	0.01	0.01	U	
7439-89-6	IRON	1	0.48	0.1	5	
7439-92-1	LEAD	1	0.003	0.003	U	
7439-95-4	MAGNESIUM	1	28	1		
7439-96-5	MANGANESE	1	0.56	0.01		
7440-02-0	NICKEL	1	0.02	0.02	U	
7440-09-7	POTASSIUM	1	4.3	1		
7782-49-2	SELENIUM	1	0.005	0.005	U	
7440-22-4	SILVER	1	0.01	0.01	U	
7440-23-5	SODIUM	1	14	1		
7440-28-0	THALLIUM	1	0.01	0.01	U	
7440-62-2	VANADIUM	1	0.01	0.01	U	
7440-66-6	ZINC	1	0.97	0.02		

Data Package ID: IT0310177-1

MM
12/2/03 000020

Total Recoverable ICP Metals

Method SW6010

Sample Results

Lab Name: Paragon Analytics, Inc.

Work Order Number: 0310177

Client Name: URS Operating Services, Inc.

ClientProject ID: Rico Argentine

Field ID: RA-SW-07
Lab ID: 0310177-7

Sample Matrix: WATER
% Moisture: N/A
Date Collected: 21-Oct-03
Date Extracted: 29-Oct-03
Date Analyzed: 30-Oct-03

Prep Batch: IP031029-1
QCBatchID: IP031029-1-1
Run ID: IT031030-1A1
Cleanup: NONE
Basis: As Received

Sample Allquot: 50 g
Final Volume: 50 g
Result Units: mg/l
Clean DF: 1
File Name: TS31030

CASNO	Target Analyte	Dilution Factor	Result	Reporting Limit	Result Qualifier	EPA Qualifier
7429-90-5	ALUMINUM	1	0.2	0.2	U	
7440-36-0	ANTIMONY	1	0.02	0.02	U	
7440-38-2	ARSENIC	1	0.01	0.01	U	
7440-39-3	BARIUM	1	0.12	0.1		
7440-41-7	BERYLLIUM	1	0.005	0.005	U	
7440-43-9	CADMIUM	1	0.005	0.005	U	
7440-70-2	CALCIUM	1	36	1		
7440-47-3	CHROMIUM	1	0.01	0.01	U	
7440-48-4	COBALT	1	0.01	0.01	U	
7440-50-8	COPPER	1	0.01	0.01	U	
7439-89-6	IRON	1	0.1	0.1	U	MS
7439-92-1	LEAD	1	0.003	0.003	U	
7439-95-4	MAGNESIUM	1	3.7	1		
7439-96-5	MANGANESE	1	0.01	0.01	U	
7440-02-0	NICKEL	1	0.02	0.02	U	
7440-09-7	POTASSIUM	1	1	1	U	
7782-49-2	SELENIUM	1	0.005	0.005	U	
7440-22-4	SILVER	1	0.01	0.01	U	
7440-23-5	SODIUM	1	1.6	1		
7440-28-0	THALLIUM	1	0.01	0.01	U	
7440-62-2	VANADIUM	1	0.01	0.01	U	
7440-66-6	ZINC	1	0.02	0.02	U	

Data Package ID: IT0310177-1

MM
12/2/03 000021

Total Recoverable ICP Metals

Method SW6010

Sample Results

Lab Name: Paragon Analytics, Inc.

Work Order Number: 0310177

Client Name: URS Operating Services, Inc.

ClientProject ID: Rico Argentine

Field ID: RA-SW-08
Lab ID: 0310177-8

Sample Matrix: WATER
% Moisture: N/A
Date Collected: 21-Oct-03
Date Extracted: 29-Oct-03
Date Analyzed: 30-Oct-03

Prep Batch: IP031029-1
QCBatchID: IP031029-1-1
Run ID: IT031030-1A1
Cleanup: NONE
Basis: As Received

Sample Allquot: 50g
Final Volume: 50g
Result Units: mg/l
Clean DF: 1
File Name: TS31030

CASNO	Target Analyte	Dilution Factor	Result	Reporting Limit	Result Qualifier	EPA Qualifier
7429-90-5	ALUMINUM	1	0.2	0.2	U	
7440-36-0	ANTIMONY	1	0.02	0.02	U	
7440-38-2	ARSENIC	1	0.01	0.01	U	
7440-39-3	BARIUM	1	0.1	0.1	U	
7440-41-7	BERYLLIUM	1	0.005	0.005	U	
7440-43-9	CADMIUM	1	0.005	0.005	U	
7440-70-2	CALCIUM	1	250	1		
7440-47-3	CHROMIUM	1	0.01	0.01	U	
7440-48-4	COBALT	1	0.01	0.01	U	
7440-50-8	COPPER	1	0.01	0.01	U	
7439-89-6	IRON	1	0.18	0.1	S	
7439-92-1	LEAD	1	0.003	0.003	U	
7439-95-4	MAGNESIUM	1	40	1		
7439-96-5	MANGANESE	1	3	0.01		
7440-02-0	NICKEL	1	0.02	0.02	U	
7440-09-7	POTASSIUM	1	3.3	1		
7782-49-2	SELENIUM	1	0.005	0.005	U	
7440-22-4	SILVER	1	0.01	0.01	U	
7440-23-5	SODIUM	1	2.6	1		
7440-28-0	THALLIUM	1	0.01	0.01	U	
7440-82-2	VANADIUM	1	0.01	0.01	U	
7440-66-6	ZINC	1	2.5	0.02		

Data Package ID: IT0310177-1

MM
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Dissolved ICP Metals

Method SW6010

Sample Results

Lab Name: Paragon Analytics, Inc.

Work Order Number: 0310177

Client Name: URS Operating Services, Inc.

ClientProject ID: Rico Argentine

Field ID: RA-GW-02

Lab ID: 10310177-9

Sample Matrix: WATER

% Moisture: N/A

Date Collected: 22-Oct-03

Date Extracted: 29-Oct-03

Date Analyzed: 30-Oct-03

Prep Batch: IP031029-1

QCBatchID: IP031029-1-1

Run ID: IT031030-1A1

Cleanup: NONE

Basis: As Received

Sample Allquot: 50 g

Final Volume: 50 g

Result Units: mg/l

Clean DF: 1

File Name: TS31030

CASNO	Target Analyte	Dilution Factor	Result	Reporting Limit	Result Qualifier	EPA Qualifier
7429-90-5	ALUMINUM	1	0.2	0.2	U	
7440-38-0	ANTIMONY	1	0.02	0.02	U	
7440-38-2	ARSENIC	1	0.01	0.01	U	
7440-39-3	BARIUM	1	0.13	0.1		
7440-41-7	BERYLLIUM	1	0.005	0.005	U	
7440-43-9	CADMIUM	1	0.005	0.005	U	
7440-70-2	CALCIUM	1	53	1		
7440-47-3	CHROMIUM	1	0.01	0.01	U	
7440-48-4	COBALT	1	0.01	0.01	U	
7440-50-8	COPPER	1	0.014	0.01		
7439-89-6	IRON	1	0.1	0.1	U	43
7439-92-1	LEAD	1	0.003	0.003	U	
7439-95-4	MAGNESIUM	1	9.4	1		
7439-96-5	MANGANESE	1	0.01	0.01	U	
7440-02-0	NICKEL	1	0.02	0.02	U	
7440-09-7	POTASSIUM	1	1.1	1		
7782-49-2	SELENIUM	1	0.005	0.005	U	
7440-22-4	SILVER	1	0.01	0.01	U	
7440-23-5	SODIUM	1	1.1	1		
7440-28-0	THALLIUM	1	0.01	0.01	U	
7440-62-2	VANADIUM	1	0.01	0.01	U	
7440-66-6	ZINC	1	0.02	0.02	U	

Data Package ID: IT0310177-1

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Dissolved ICP Metals

Method SW6010

Sample Results

Lab Name: Paragon Analytics, Inc.

Work Order Number: 0310177

Client Name: URS Operating Services, Inc.

Client/Project ID: Rico Argentine

Field ID: RA-GW-03
Lab ID: 0310177-10

Sample Matrix: WATER
% Moisture: N/A
Date Collected: 19-Oct-03
Date Extracted: 29-Oct-03
Date Analyzed: 30-Oct-03

Prep Batch: IP031029-1
QCBatchID: IP031029-1-1
Run ID: IT031030-1A1
Cleanup: NONE
Basis: As Received

Sample Allquot: 50 g
Final Volume: 50 g
Result Units: mg/l
Clean DF: 1
File Name: TS31030

CASNO	Target Analyte	Dilution Factor	Result	Reporting Limit	Result Qualifier	EPA Qualifier
7429-90-5	ALUMINUM	1	0.2	0.2	U	
7440-36-0	ANTIMONY	1	0.02	0.02	U	
7440-38-2	ARSENIC	1	0.037	0.01		
7440-39-3	BARIUM	1	0.1	0.1	U	
7440-41-7	BERYLLIUM	1	0.0056	0.005		
7440-43-9	CADMIUM	1	0.005	0.005	U	
7440-70-2	CALCIUM	2	680	2		
7440-47-3	CHROMIUM	1	0.01	0.01	U	
7440-48-4	COBALT	1	0.01	0.01	U	
7440-50-8	COPPER	1	0.01	0.01	U	
7439-89-6	IRON	1	7.2	0.1	S	
7439-92-1	LEAD	2	0.006	0.006	U	
7439-95-4	MAGNESIUM	1	90	1		
7439-96-5	MANGANESE	1	1	0.01		
7440-02-0	NICKEL	1	0.02	0.02	U	
7440-09-7	POTASSIUM	1	29	1		
7782-49-2	SELENIUM	1	0.005	0.005	U	
7440-22-4	SILVER	1	0.01	0.01	U	
7440-23-5	SODIUM	1	62	1		
7440-28-0	THALLIUM	1	0.01	0.01	U	
7440-62-2	VANADIUM	1	0.01	0.01	U	
7440-66-6	ZINC	1	0.087	0.02		

Data Package ID: IT0310177-1

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Dissolved ICP Metals

Method SW6010

Sample Results

Lab Name: Paragon Analytics, Inc.

Work Order Number: 0310177

Client Name: URS Operating Services, Inc.

ClientProject ID: Rico Argentine

Field ID: RA-GW-04
Lab ID: 0310177-11

Sample Matrix: WATER
% Moisture: N/A
Date Collected: 19-Oct-03
Date Extracted: 29-Oct-03
Date Analyzed: 30-Oct-03

Prep Batch: IP031029-1
QCBatchID: IP031029-1-1
Run ID: IT031030-1A1
Cleanup: NONE
Basis: As Received

Sample Aliquot: 50g
Final Volume: 50g
Result Units: mg/l
Clean DF: 1
File Name: TS31030

CASNO	Target Analyte	Dilution Factor	Result	Reporting Limit	Result Qualifier	EPA Qualifier
7429-90-5	ALUMINUM	1	0.2	0.2	U	
7440-36-0	ANTIMONY	1	0.02	0.02	U	
7440-38-2	ARSENIC	1	0.025	0.01		
7440-39-3	BARIUM	1	0.1	0.1	U	
7440-41-7	BERYLLIUM	1	0.0054	0.005		
7440-43-9	CADMIUM	1	0.005	0.005	U	
7440-70-2	CALCIUM	2	700	2		
7440-47-3	CHROMIUM	1	0.01	0.01	U	
7440-48-4	COBALT	1	0.01	0.01	U	
7440-50-8	COPPER	1	0.01	0.01	U	
7439-89-6	IRON	1	6.9	0.1	J	
7439-92-1	LEAD	2	0.006	0.006	U	
7439-95-4	MAGNESIUM	1	82	1		
7439-96-5	MANGANESE	1	1.3	0.01		
7440-02-0	NICKEL	1	0.02	0.02	U	
7440-09-7	POTASSIUM	1	26	1		
7782-49-2	SELENIUM	1	0.005	0.005	U	
7440-22-4	SILVER	1	0.01	0.01	U	
7440-23-5	SODIUM	1	59	1		
7440-28-0	THALLIUM	1	0.01	0.01	U	
7440-62-2	VANADIUM	1	0.01	0.01	U	
7440-66-6	ZINC	1	0.042	0.02		

Data Package ID: IT0310177-1

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Dissolved ICP Metals

Method SW6010

Sample Results

Lab Name: Paragon Analytics, Inc.

Work Order Number: 0310177

Client Name: URS Operating Services, Inc.

Client Project ID: Rico Argentine

Field ID: RA-GW-05
Lab ID: 0310177-12

Sample Matrix: WATER
% Moisture: N/A
Date Collected: 20-Oct-03
Date Extracted: 29-Oct-03
Date Analyzed: 30-Oct-03

Prep Batch: IP031029-1
QCBatchID: IP031029-1-1
Run ID: IT031030-1A1
Cleanup: NONE
Basis: As Received

Sample Aliquot: 50g
Final Volume: 50g
Result Units: mg/l
Clean DF: 1
File Name: TS31030

CASNO	Target Analyte	Dilution Factor	Result	Reporting Limit	Result Qualifier	EPA Qualifier
7429-90-5	ALUMINUM	1	0.2	0.2	U	
7440-36-0	ANTIMONY	1	0.02	0.02	U	
7440-38-2	ARSENIC	1	0.01	0.01	U	
7440-39-3	BARIUM	1	0.1	0.1	U	
7440-41-7	BERYLLIUM	1	0.005	0.005	U	
7440-43-9	CADMIUM	1	0.005	0.005	U	
7440-70-2	CALCIUM	1	48	1		
7440-47-3	CHROMIUM	1	0.01	0.01	U	
7440-48-4	COBALT	1	0.01	0.01	U	
7440-50-8	COPPER	1	0.01	0.01	U	
7439-89-6	IRON	1	0.1	0.1	U	US
7439-92-1	LEAD	1	0.003	0.003	U	
7439-95-4	MAGNESIUM	1	6	1		
7439-96-5	MANGANESE	1	0.14	0.01		
7440-02-0	NICKEL	1	0.02	0.02	U	
7440-09-7	POTASSIUM	1	1	1		
7782-49-2	SELENIUM	1	0.005	0.005	U	
7440-22-4	SILVER	1	0.01	0.01	U	
7440-23-5	SODIUM	1	1.8	1		
7440-28-0	THALLIUM	1	0.01	0.01	U	
7440-62-2	VANADIUM	1	0.01	0.01	U	
7440-66-6	ZINC	1	0.02	0.02	U	

Data Package ID: IT0310177-1

Date Printed: Thursday, November 06, 2003

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Dissolved ICP Metals

Method SW6010

Sample Results

Lab Name: Paragon Analytics, Inc.

Work Order Number: 0310177

Client Name: URS Operating Services, Inc.

ClientProject ID: Rico Argentine

Field ID: RA-SO-08
Lab ID: 0310177-13

Sample Matrix: WATER
% Moisture: N/A
Date Collected: 22-Oct-03
Date Extracted: 29-Oct-03
Date Analyzed: 30-Oct-03

Prep Batch: IP031029-1
QCBatchID: IP031029-1-1
Run ID: IT031030-1A1
Cleanup: NONE
Basis: As Received

Sample Allquot: 50g
Final Volume: 50g
Result Units: mg/l
Clean DF: 1
File Name: TS31030

CASNO	Target Analyte	Dilution Factor	Result	Reporting Limit	Result Qualifier	EPA Qualifier
7429-90-5	ALUMINUM	1	0.2	0.2	U	
7440-36-0	ANTIMONY	1	0.02	0.02	U	
7440-38-2	ARSENIC	1	0.01	0.01	U	
7440-39-3	BARIUM	1	0.1	0.1	U	
7440-41-7	BERYLLIUM	1	0.005	0.005	U	
7440-43-8	CADMIUM	1	0.03	0.005		
7440-70-2	CALCIUM	1	260	1		
7440-47-3	CHROMIUM	1	0.01	0.01	U	
7440-48-4	COBALT	1	0.01	0.01	U	
7440-50-8	COPPER	1	0.038	0.01		
7439-89-6	IRON	1	1.7	0.1	J	
7439-92-1	LEAD	1	0.003	0.003	U	
7439-95-4	MAGNESIUM	1	21	1		
7439-96-5	MANGANESE	1	2.1	0.01		
7440-02-0	NICKEL	1	0.02	0.02	U	
7440-09-7	POTASSIUM	1	2.3	1		
7782-49-2	SELENIUM	1	0.005	0.005	U	
7440-22-4	SILVER	1	0.01	0.01	U	
7440-23-5	SODIUM	1	11	1		
7440-28-0	THALLIUM	1	0.01	0.01	U	
7440-62-2	VANADIUM	1	0.01	0.01	U	
7440-66-6	ZINC	1	5.3	0.02		

Data Package ID: IT0310177-1

Date Printed: Thursday, November 06, 2003

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Dissolved ICP Metals

Method SW6010

Sample Results

Lab Name: Paragon Analytics, Inc.

Work Order Number: 0310177

Client Name: URS Operating Services, Inc.

ClientProject ID: Rico Argentine

Field ID: RA-SW-02
Lab ID: 0310177-14

Sample Matrix: WATER
% Moisture: N/A
Date Collected: 22-Oct-03
Date Extracted: 29-Oct-03
Date Analyzed: 30-Oct-03

Prep Batch: IP031029-1
QCBatchID: IP031029-1-1
Run ID: IT031030-1A1
Cleanup: NONE
Basis: As Received

Sample Allquot: 50 g
Final Volume: 50 g
Result Units: mg/l
Clean DF: 1
File Name: TS31030

CASNO	Target Analyte	Dilution Factor	Result	Reporting Limit	Result Qualifier	EPA Qualifier
7429-90-5	ALUMINUM	1	0.2	0.2	U	
7440-36-0	ANTIMONY	1	0.02	0.02	U	
7440-38-2	ARSENIC	1	0.01	0.01	U	
7440-39-3	BARIUM	1	0.1	0.1	U	
7440-41-7	BERYLLIUM	1	0.005	0.005	U	
7440-43-9	CADMIUM	1	0.005	0.005	U	
7440-70-2	CALCIUM	1	330	1		
7440-47-3	CHROMIUM	1	0.01	0.01	U	
7440-48-4	COBALT	1	0.01	0.01	U	
7440-50-8	COPPER	1	0.01	0.01	U	
7439-89-6	IRON	1	0.1	0.1	U	5
7439-92-1	LEAD	1	0.003	0.003	U	
7439-95-4	MAGNESIUM	1	30	1		
7439-96-5	MANGANESE	1	0.54	0.01		
7440-02-0	NICKEL	1	0.02	0.02	U	
7440-09-7	POTASSIUM	1	4.3	1		
7782-49-2	SELENIUM	1	0.005	0.005	U	
7440-22-4	SILVER	1	0.01	0.01	U	
7440-23-5	SODIUM	1	14	1		
7440-28-0	THALLIUM	1	0.01	0.01	U	
7440-62-2	VANADIUM	1	0.01	0.01	U	
7440-66-6	ZINC	1	0.96	0.02		

Data Package ID: IT0310177-1

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Paragon Analytics Inc.

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LIMS Version: 4.227B

12/2/03 000028

Dissolved ICP Metals

Method SW6010

Sample Results

Lab Name: Paragon Analytics, Inc.

Work Order Number: 0310177

Client Name: URS Operating Services, Inc.

Client Project ID: Rico Argentine

Field ID: RA-SW-07
Lab ID: 0310177-15

Sample Matrix: WATER
% Moisture: N/A
Date Collected: 21-Oct-03
Date Extracted: 29-Oct-03
Date Analyzed: 30-Oct-03

Prep Batch: IP031029-1
QCBatchID: IP031029-1-1
Run ID: IT031030-1A1
Cleanup: NONE
Basis: As Received

Sample Allquot: 50g
Final Volume: 50g
Result Units: mg/l
Clean DF: 1
File Name: TS31030

CASNO	Target Analyte	Dilution Factor	Result	Reporting Limit	Result Qualifier	EPA Qualifier
7429-90-5	ALUMINUM	1	0.2	0.2	U	
7440-36-0	ANTIMONY	1	0.02	0.02	U	
7440-38-2	ARSENIC	1	0.01	0.01	U	
7440-39-3	BARIUM	1	0.11	0.1		
7440-41-7	BERYLLIUM	1	0.005	0.005	U	
7440-43-8	CADMIUM	1	0.005	0.005	U	
7440-70-2	CALCIUM	1	37	1		
7440-47-3	CHROMIUM	1	0.01	0.01	U	
7440-48-4	COBALT	1	0.01	0.01	U	
7440-50-8	COPPER	1	0.01	0.01	U	
7439-89-6	IRON	1	0.1	0.1	U	J
7439-92-1	LEAD	1	0.003	0.003	U	
7439-95-4	MAGNESIUM	1	3.9	1		
7439-96-5	MANGANESE	1	0.01	0.01	U	
7440-02-0	NICKEL	1	0.02	0.02	U	
7440-09-7	POTASSIUM	1	1	1	U	
7782-49-2	SELENIUM	1	0.005	0.005	U	
7440-22-4	SILVER	1	0.01	0.01	U	
7440-23-5	SODIUM	1	1.5	1		
7440-28-0	THALLIUM	1	0.01	0.01	U	
7440-62-2	VANADIUM	1	0.01	0.01	U	
7440-66-6	ZINC	1	0.02	0.02	U	

Data Package ID: IT0310177-1

Date Printed: Thursday, November 06, 2003

Paragon Analytics Inc.

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NA
12/2/03

000029

Dissolved ICP Metals

Method SW6010

Sample Results

Lab Name: Paragon Analytics, Inc.

Work Order Number: 0310177

Client Name: URS Operating Services, Inc.

ClientProject ID: Rico Argentine

Field ID: RA-SW-06
Lab ID: 0310177-16

Sample Matrix: WATER

% Moisture: N/A

Date Collected: 21-Oct-03

Date Extracted: 29-Oct-03

Date Analyzed: 30-Oct-03

Prep Batch: IP031029-1

QCBatchID: IP031029-1-1

Run ID: IT031030-1A1

Cleanup: NONE

Basis: As Received

Sample Aliquot: 50 g

Final Volume: 50 g

Result Units: mg/l

Clean DF: 1

File Name: TS31030

CASNO	Target Analyte	Dilution Factor	Result	Reporting Limit	Result Qualifier	EPA Qualifier
7429-90-5	ALUMINUM	1	0.2	0.2	U	
7440-36-0	ANTIMONY	1	0.02	0.02	U	
7440-38-2	ARSENIC	1	0.01	0.01	U	
7440-39-3	BARIUM	1	0.1	0.1	U	
7440-41-7	BERYLLIUM	1	0.005	0.005	U	
7440-43-9	CADMIUM	1	0.005	0.005	U	
7440-70-2	CALCIUM	1	250	1		
7440-47-3	CHROMIUM	1	0.01	0.01	U	
7440-48-4	COBALT	1	0.01	0.01	U	
7440-50-8	COPPER	1	0.01	0.01	U	
7439-89-6	IRON	1	0.1	0.1	U <i>NS</i>	
7439-92-1	LEAD	1	0.003	0.003	U	
7439-95-4	MAGNESIUM	1	40	1		
7439-96-5	MANGANESE	1	2.9	0.01		
7440-02-0	NICKEL	1	0.02	0.02	U	
7440-09-7	POTASSIUM	1	2.8	1		
7782-49-2	SELENIUM	1	0.005	0.005	U	
7440-22-4	SILVER	1	0.01	0.01	U	
7440-23-5	SODIUM	1	2.5	1		
7440-28-0	THALLIUM	1	0.01	0.01	U	
7440-62-2	VANADIUM	1	0.01	0.01	U	
7440-66-6	ZINC	1	2.4	0.02		

Data Package ID: IT0310177-1

Date Printed: Thursday, November 06, 2003

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MA
12/2/03 000030

Total MERCURY

Method SW7470

Sample Results

Lab Name: Paragon Analytics, Inc.

Client Name: URS Operating Services, Inc.

Client Project ID: Rico Argentine

Work Order Number: 0310177

Reporting Basis: As Received

Final Volume: 20 g

Matrix: WATER

Result Units: mg/l

Client Sample ID	Lab ID	Date Collected	Date Prepared	Date Analyzed	Percent Moisture	Dilution Factor	Result	Reporting Limit	Flag	Sample Aliquot
RA-GW-02	0310177-1	10/22/2003	10/28/2003	10/29/2003	N/A	1	0.0002	0.0002	U	20 g
RA-GW-03	0310177-2	10/19/2003	10/28/2003	10/29/2003	N/A	1	0.0002	0.0002	U	20 g
RA-GW-04	0310177-3	10/19/2003	10/28/2003	10/29/2003	N/A	1	0.0002	0.0002	U	20 g
RA-GW-05	0310177-4	10/20/2003	10/28/2003	10/29/2003	N/A	1	0.0002	0.0002	U	20 g
RA-SO-08	0310177-5	10/22/2003	10/28/2003	10/29/2003	N/A	1	0.0002	0.0002	U	20 g
RA-SW-02	0310177-6	10/22/2003	10/28/2003	10/29/2003	N/A	1	0.0002	0.0002	U	20 g
RA-SW-07	0310177-7	10/21/2003	10/28/2003	10/29/2003	N/A	1	0.0002	0.0002	U	20 g
RA-SW-08	0310177-8	10/21/2003	10/28/2003	10/29/2003	N/A	1	0.0002	0.0002	U	20 g

Comments:

1. ND or U = Not Detected at or above the client requested detection limit.

Data Package ID: HG0310177-1

Date Printed: Thursday, November 06, 2003

Paragon Analytics Inc.

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MA
12/2/03

000031

Dissolved MERCURY

Method SW7470

Sample Results

Lab Name: Paragon Analytics, Inc.
Client Name: URS Operating Services, Inc.
Client Project ID: Rico Argentine
Work Order Number: 0310177
Reporting Basis: As Received

Final Volume: 20 g
Matrix: WATER
Result Units: mg/l

Client Sample ID	Lab ID	Date Collected	Date Prepared	Date Analyzed	Percent Moisture	Dilution Factor	Result	Reporting Limit	Flag	Sample Aliquot
RA-GW-02	0310177-9	10/22/2003	10/28/2003	10/29/2003	N/A	1	0.0002	0.0002	U	20 g
RA-GW-03	0310177-10	10/19/2003	10/28/2003	10/29/2003	N/A	1	0.0002	0.0002	U	20 g
RA-GW-04	0310177-11	10/19/2003	10/28/2003	10/29/2003	N/A	1	0.0002	0.0002	U	20 g
RA-GW-05	0310177-12	10/20/2003	10/28/2003	10/29/2003	N/A	1	0.0002	0.0002	U	20 g
RA-SO-08	0310177-13	10/22/2003	10/28/2003	10/29/2003	N/A	1	0.0002	0.0002	U	20 g
RA-SW-02	0310177-14	10/22/2003	10/28/2003	10/29/2003	N/A	1	0.0002	0.0002	U	20 g
RA-SW-07	0310177-15	10/21/2003	10/28/2003	10/29/2003	N/A	1	0.0002	0.0002	U	20 g
RA-SW-08	0310177-16	10/21/2003	10/28/2003	10/29/2003	N/A	1	0.0002	0.0002	U	20 g

Comments:

1. ND or U = Not Detected at or above the client requested detection limit.

Data Package ID: HG0310177-1

MA
12/2/03

000032

**REGION VIII
DATA VALIDATION REPORT
INORGANIC**

TDD No.	Site Name		Operable Unit
0308-0013	Rico Argentine		
RPM/OSC Name			
Luke Chavez			
Contractor Laboratory	Contract No.	SDG No.	Laboratory DPO/Region
Paragon Analytics, Inc.	NA	0310174	

Review Assigned Date November 13, 2003 Data Validator Mark McDaniel
 Review Completion Date December 01, 2003

Station Number	Laboratory ID	Matrix	Analysis
RA-AR-CA-1D1	0310174-1	Soil	Metals by SW-846 methods 6010B and 7471A. Total cyanide by SW-846 method 9014.
RA-AR-SC-1S2	0310174-2		
RA-AR-TP-1D1	0310174-3		
RA-AR-WI-1D1	0310174-4		
RA-CO-AD-1S2	0310174-5		
RA-CO-JN-1S2	0310174-6		
RA-CO-WH-1S2	0310174-7		
RA-GA-CN-1S2	0310174-8		
RAGA-GA-1S2	0310174-9		
RA-GA-HO-1S2	0310174-10		
RA-HA-RB-05	0310174-11		
RA-HA-RB-06	0310174-12		
RA-HA-RB-07	0310174-13		

UOS

URS Operating Services, Inc.

Data Validation Report

Station Number	Laboratory ID	Matrix	Analysis
RA-HA-RB-08	0310174-14	Soil	Metals by SW-846 Method 6010B and 7471A. Total cyanide by SW-846 9014.
RA-HA-RB-09	0310174-15		
RA-HA-RO-1S1	0310174-16		
RA-HY-FS-D1	0310174-17		
RA-PK-MI-1D1	0310174-18		
RA-RI-FE-1D1	0310174-19		
RA-RI-GS-1S3	0310174-20		

DATA QUALITY STATEMENT

- () Data are ACCEPTABLE according to EPA Functional guidelines with no qualifiers (flags) added by the reviewer.
- () Data are UNACCEPTABLE according to EPA Functional Guidelines.
- (X) Data are acceptable with QUALIFICATIONS noted in review.

Telephone/Communication Logs Enclosed? Yes _____ No X

TPO Attention Required? Yes _____ No X If yes, list the items that require attention:

INORGANIC DATA QUALITY ASSURANCE REVIEW

REVIEW NARRATIVE SUMMARY

This data package was reviewed according to "USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Data Review," February 1994, modified for the methods used.

Raw data were reviewed for completeness and transcription accuracy onto the summary forms. Approximately 10-20% of the results reported in each of the samples, calibrations, and QC analyses were recalculated and verified. If problems were identified during the recalculation of results, a more thorough calculation check was performed.

SDG No. 0310174 consisted of 20 soil samples for TAL metals by 6010B and 7471A, as well as total cyanide by 9014.

The following table lists the data qualifiers added to the sample analyses. Please see Data Qualifier Definitions, attached to the end of this report.

Sample ID	Elements	Qualifiers	Reason for Qualification	Review Section
RA-GA-HO-1S2 RA-HY-FS-D1	Pb	None	CCB > CRQL, sample result > 10X CCB result.	VII
All	Al, Cu, Fe, Pb, Mn, Ag, Zn	None	Sample conc. > 4X matrix spike amount.	IX
All	Cu	J	MS/MSD RPD = 39% (>35%)	IX
All	Sb, Cd, Ca	J/UJ	MS/MSD recoveries fail criteria.	IX
All	Ag	J/UJ	Duplicate sample RPD = 82%	XI

Method/SOW Number 6010B, 7471A, 9014

Revision _____

Inorganic Deliverables Completeness Checklist

- P Inorganic Cover Page
 - P Inorganic Analysis Data Sheets
 - P Initial Calibration and Calibration Verification Results
 - P Continuing Calibration Verification Results
 - P CRDL Standard for ICP and AA
 - P Blank Analysis Results
 - P ICP Interference Check Sample Results
 - P Spiked Sample Results
 - P Post-digest Spiked Sample Analysis
 - R Duplicate Sample Results
 - NP Instrument Detection Limits
 - P Laboratory Control Sample Results
 - P Standard Addition Results
 - P ICP Serial Dilution Results
 - NA Holding Times Summary Sheet
 - P ICP Interelement Correction Factors
 - P ICP Linear Ranges
 - P Raw Data
 - P Samples P Calibration Standards
 - P Duplicates NA ICP QC (ICS and Serial Dilution)
 - NA Cr6 P Mercury Analysis
 - P Percent Solids Calculations - Solids Only
 - P Sample Prep/Digestion Logs (Form XIII)
 - P Analysis Run Log (Form XIV)
 - P Chain-of-Custody
 - P Sample Description
 - P Case Narrative
 - P Method References
- | | |
|---------------------------|-----------------|
| <u>P</u> Blanks | <u>P</u> Spikes |
| <u>P</u> LCS | |
| <u>P</u> Cyanide Analysis | |

KEY:

- P = Provided in original data package, as required by the SOW
- R = Provided as Resubmission
- NP = Not provided in original data package or as resubmission
- NR = Not required under the SOW
- NA = Not applicable to this data package or analysis

I. DELIVERABLES

All deliverables were present as specified in the Statement of Work.

Yes ___ No X

Comments: The laboratory provided QA/QC summary reports, however, these summary reports are not considered CLP equivalent forms.

II. HOLDING TIMES AND PRESERVATION CRITERIA

All holding times and preservation criteria were met.

Yes ___ No X

Comments: Temperature of samples upon receipt was 16°C. The preservation requirements are 4°C(±2°C). No qualifications are necessary.

III. INSTRUMENT CALIBRATIONS: STANDARDS AND BLANKS

Initial instrument calibrations were performed according to requirements.

Yes X No ___

Comments: None.

The instruments were calibrated daily and each time an analysis run was performed.

Yes X No ___

Comments: None.

The instruments were calibrated using one blank and the appropriate number of standards.

Yes X No ___

Comments: None.

IV. FORM 1 - SAMPLE ANALYSIS RESULTS

Sample analyses were entered correctly on Form Is.

Yes X No ___

Comments: None.

V. FORM 2A - INITIAL AND CONTINUING CALIBRATION VERIFICATION

The initial and continuing calibration verification standards (ICV and CCV, respectively) met requirements.

Yes X No ___

Comments: None.

The calibration verification results were within 90-110% recovery for metals, 80-120% for mercury, and 85-115% for cyanide.

Yes X No ___

Comments: None.

The continuing calibration standards were run at 10% frequency.

Yes X No ___

Comments: Continuing calibration blanks were run every 10 samples.

VI. FORM 2B - CRDL STANDARD FOR ICP AND AA

ICP Analysis: Standards (CRI) at two times the CRDL or the IDL (whichever were greater) were analyzed at the beginning and the end of each sample run.

Yes X No ___ NA ___

Comments: None.

GFAA Analysis: Standards (CRA) at two times CRDL were analyzed at the beginning of each sample run.

Yes___ No___ NA X

Comments: Samples were not analyzed by GFAA.

The CRI and/or the CRA were analyzed after the ICV.

Yes___ No X

Comments: None.

VII. FORM 3 - BLANKS

The initial and continuing calibration blanks (ICB and CCB, respectively) met requirements.

Yes___ No X

Comments: See last section in blanks review below.

The continuing calibration blanks were run at 10% frequency.

Yes X No___

Comments: Continuing calibration blanks were run every 10 samples.

A laboratory/preparation blank was run at the frequency of one per twenty samples, or per sample delivery group (whichever is more frequent), and for each matrix analyzed.

Yes X No___

Comments: None.

All analyzed blanks were free of contamination.

Yes ___ No X

Comments: CCB#4 contained Pb at just above the CRQL due to carry over from the samples in this SDG. Only 2 results for lead were reported from the group of 20 samples on either side of the offending CCB (the other 18 samples required dilutions for Pb). Affected samples are RA-GA-HO-1S2 & RA-HY-FS-D1. Since both results associated with this CCB contained greater than 10X the amount in the blank, no flags are required.

VIII. FORM 4 - ICP INTERFERENCE CHECK SAMPLE

The ICP interference check sample (ICS) was run twice per eight hour shift and/or at the beginning and end of each sample set analysis sequence (whichever is more frequent).

Yes X No ___ NA ___

Comments: None.

Percent recovery of the analytes in solution ICSAB were within the range of 80-120%.

Yes X No ___ NA ___

Comments: Potassium, and sodium were not included in the ICSAB analysis and were therefore not evaluated.

IX. FORM 5A - MATRIX SPIKE SAMPLE ANALYSIS

A matrix spike sample was analyzed with every twenty or fewer samples of a similar matrix, or one per sample delivery group (whichever is more frequent).

Yes X No ___

Comments: None.

The percent recoveries (%R) were calculated correctly.

$$\% \text{ Recovery} = \frac{(SSR - SR)}{SA} \times 100$$

SSR = spiked sample result
SR = sample result
SA = spike added

Yes X No ___

Comments: None.

Spike recoveries were within the range of 75-125% (an exception is granted where the sample concentration is four times the spike concentration).

Yes ___ No X

Comments: The following table details MS/MSD failures:

Element	Spike Recovery%	Matrix	Samples Affected	Qualifiers
Sb Cd Ca	MS=50, MSD=45 MSD=132 MS=66, MSD=121	Soil	All	J/UJ

Element	MS/MSD RPD	Matrix	Samples Affected	Qualifiers
Cu	39	Soil	All	J/UJ

Element	Native sample > 4X amount of spike.	Matrix	Samples Affected	Qualifiers
Al, Cu, Fe, Pb, Mn, Ag, Zn	MS/MSD could not be evaluated.	Soil	All	J/UJ

X. FORM 5B - POST DIGEST SPIKE RECOVERY

A post-digest spike was performed for those elements that did not meet the specified criteria (i.e., Pre-digestion/pre-distillation spike recovery falls outside of control limits and sample result is less than four times the spike amount added.).

Yes X No ___ Not Required ___

Comments: None.

XI. FORM 6 - DUPLICATE SAMPLE ANALYSIS

Duplicate sample analysis was performed with every twenty or fewer samples of a similar matrix, or one per sample delivery group (whichever is more frequent).

Yes X No ___

Comments: None.

The RPDs were calculated correctly.

$$RPD = \frac{(S - D)}{(S + D)/2} \times 100$$

S = sample
D = duplicate

Yes X No

Comments: None.

For sample concentrations greater than five times the CRDL, RPDs were within ±20% (limits of ±35% apply for soil/sediments/tailings samples).

Yes X No

Comments: The following table details compounds exceed 35% RPD between the sample and sample duplicate analyses:

Sample ID	Elements	RPD	Qualifiers
All	Ag	82%	J/UJ

For sample concentrations less than five times the CRDL, duplicate analysis results were within the control window of ± CRDL (two times CRDL for soils).

Yes X No

Comments: None.

XII. GFAA QC

Duplicate injections were performed on all GFAA samples and the RSD was within ± 20%.

Yes No NA X

Comments: GFAA analyses were not performed on these samples.

Analytical spikes were performed on all GFAA samples and the percent recovery was 85 - 115%.

Yes No NA X

Comments: None.

MSAs were analyzed when required and the correlation coefficient was > 0.995.

Yes___ No___ NA X

Comments: None.

XIII. FORM 7 - LABORATORY CONTROL SAMPLE

The laboratory control sample (LCS) was prepared and analyzed with every twenty or fewer samples of a similar matrix, or one per sample delivery group (whichever is more frequent).

Yes X No___

Comments: None.

All results were within control limits.

Yes X No___

Comments: None.

XIV. FORM 8 - STANDARD ADDITION RESULTS

Results from graphite furnace standard additions were entered on Form VIII as directed in the method.

Yes___ No___ NA X

Comments: None.

XV. FORM 9 - ICP QC

A serial dilution was performed for ICP analysis with every twenty or fewer samples of a similar matrix, or one per sample delivery group, whichever is more frequent.

Yes X No___ NA___

Comments: None.

The serial dilution was without interference problems.

Yes X No___ NA___

Comments: None.

XVI. FORM 10 - QUARTERLY INSTRUMENT DETECTION LIMITS (IDL)

IDLs were provided for all elements on the target analyte list.

Yes ___ No X

Comments: IDLs and MDLs were not provided.

Reported IDLs met requirements.

Yes ___ No X

Comments: Form 10 equivalent was not provided.

XVII. FORM 11 - INTERELEMENT CORRECTION FACTORS FOR ICP

Interelement corrections for ICP were reported.

Yes X No ___ NA ___

Comments: None

XVIII. FORM 12 - ICP LINEAR RANGES

ICP linear ranges were reported.

Yes X No ___ NA ___

Comments: None.

XIX. LINEAR RANGE VERIFICATION ANALYSIS

Linear Range Verification Analysis (LRA) was performed and results were within control limits of $\pm 5\%$ of the true value.

Yes ___ No ___ NA X

Comments: None.

XX. FORM 13 - PREPARATION LOG

Information on the preparation of samples for analysis was reported on Form XIII.

Yes X No ___

Comments: None.

XXI. FORM 14 - ANALYSIS RUN LOG

A Form XIV with the required information was filled out for each analysis run in the data package.

Yes X No ___

Comments: None.

XXII. Additional Comments or Problems/Resolutions Not Addressed Above

Yes ___ No X

Comments: None.

INORGANIC DATA QUALITY ASSURANCE REVIEW**Region VIII****DATA QUALIFIER DEFINITIONS**

For the purpose of Data Validation, the following code letters and associated definitions are provided for use by the data validator to summarize the data quality. Use of additional qualifiers should be carefully considered. Definitions for all qualifiers used should be provided with each report.

GENERAL QUALIFIERS for use with both INORGANIC and ORGANIC DATA

- R** - Reported value is "rejected." Resampling or reanalysis may be necessary to verify the presence or absence of the compound.
- J** - The associated numerical value is an estimated quantity because the Quality Control criteria were not met.
- UJ** - The reported amount is estimated because Quality Control criteria were not met. Element or compound was not detected.
- NJ** - The analysis indicates the presence of an analyte that has been "tentatively identified" and the associated numerical value represents its approximate concentration.
- N** - The analysis indicates the presence of an analyte for which there is presumptive evidence to make a tentative identification.
- U** - The material was analyzed for, but was not-detected above the level of the associated value. The associated value is either the sample quantitation limit or the sample detection limit.

ACRONYMS

AA	Atomic Absorption
Ag	Silver
CCB	Continuing Calibration Blank
CCV	Continuing Calibration Verification
CFR	Code of Federal Regulations
CLP	Contract Laboratory Program
CRA	CRDL standard required for AA
CRDL	Contract Required Detection Limit
CRI	CRDL standard required for ICP
CV	Cold Vapor
EPA	U.S. Environmental Protection Agency
GFAA	Graphite Furnace Atomic Absorption
Hg	Mercury
ICB	Initial Calibration Blank
ICP	Inductively Coupled Plasma
ICS	Interference Check Sample
ICSA	Interference Check Sample (Solution A)
ICSAB	Interference Check Sample (Solution AB)
ICV	Initial Calibration Verification
IDL	Instrument Detection Limit
LCS	Laboratory Control Sample
LRA	Linear Range Verification Analysis
MSA	Method of Standard Additions
PDS	Post Digestion Spike
QC	Quality Control
RPD	Relative Percent Difference
RPM	Regional Project Manager
RSD	Percent Relative Standard Deviation
SA	Spike Added
SAS	Special Analytical Services
SDG	Sample Delivery Group
SOW	Statement of Work
SR	Sample Result
SSR	Spiked Sample Result
TPO	Technical Project Officer

Total ICP Metals

Method SW6010

Sample Results

Lab Name: Paragon Analytics, Inc.

Work Order Number: 0310174

Client Name: URS Operating Services, Inc.

ClientProject ID: Rico Argentine

Field ID: RA-AR-CA-1D1
Lab ID: 0310174-1

Sample Matrix: SOIL

% Moisture: 8.4

Date Collected: 16-Oct-03

Date Extracted: 03-Nov-03

Date Analyzed: 04-Nov-03

Prep Batch: IP031103-2

QCBatchID: IP031103-2-1

Run ID: IT031104-1A1

Cleanup: NONE

Basis: Dry Weight

Sample Aliquot: 1g

Final Volume: 100ml

Result Units: mg/kg

Clean DF: 1

File Name: TS31104

CASNO	Target Analyte	Dilution Factor	Result	Reporting Limit	Result Qualifier	EPA Qualifier
7429-90-5	ALUMINUM	1	15000	22		
7440-36-0	ANTIMONY	1	2.2	2.2	U NJ	N
7440-38-2	ARSENIC	1	18	1.1		
7440-39-3	BARIUM	1	57	11		
7440-41-7	BERYLLIUM	1	0.99	0.55		
7440-43-9	CADMIUM	5	12	2.7	J	N
7440-70-2	CALCIUM	1	14000	110	J	N
7440-47-3	CHROMIUM	1	22	1.1		
7440-48-4	COBALT	1	23	1.1		
7440-50-8	COPPER	5	1600	5.5	J	
7439-89-6	IRON	5	60000	55		
7439-92-1	LEAD	5	2700	1.6		
7439-95-4	MAGNESIUM	1	14000	110		
7439-96-5	MANGANESE	5	3200	5.5		
7440-02-0	NICKEL	1	20	2.2		
7440-09-7	POTASSIUM	1	2800	110		
7782-49-2	SELENIUM	5	3.7	2.7		
7440-22-4	SILVER	1	84	1.1	J	
7440-23-5	SODIUM	1	110	110	U	
7440-28-0	THALLIUM	5	5.5	5.5	U	
7440-62-2	VANADIUM	1	30	1.1		
7440-66-6	ZINC	5	1900	11		

MM
12/2/03

Data Package ID: IT0310174-1

Date Printed: Thursday, November 06, 2003

Paragon Analytics Inc.

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LIMS Version: 4.227B

000014

Total ICP Metals

Method SW6010

Sample Results

Lab Name: Paragon Analytics, Inc.

Work Order Number: 0310174

Client Name: URS Operating Services, Inc.

ClientProject ID: Rico Argentine

Field ID: RA-AR-SC-1S2
Lab ID: 0310174-2

Sample Matrix: SOIL

% Moisture: 14

Date Collected: 16-Oct-03

Date Extracted: 03-Nov-03

Date Analyzed: 04-Nov-03

Prep Batch: IP031103-2

QCBatchID: IP031103-2-1

Run ID: IT031104-1A1

Cleanup: NONE

Basis: Dry Weight

Sample Allquot: 1g

Final Volume: 100ml

Result Units: mg/kg

Clean DF: 1

File Name: TS31104

CASNO	Target Analyte	Dilution Factor	Result	Reporting Limit	Result Qualifier	EPA Qualifier
7429-90-5	ALUMINUM	1	10000	23		
7440-36-0	ANTIMONY	1	2.3	2.3	U AS	
7440-38-2	ARSENIC	1	11	1.2		
7440-39-3	BARIUM	1	130	12		
7440-41-7	BERYLLIUM	1	0.83	0.58		
7440-43-9	CADMIUM	2	6.6	1.2	J	
7440-70-2	CALCIUM	1	5000	120	J	
7440-47-3	CHROMIUM	1	14	1.2		
7440-48-4	COBALT	1	8.9	1.2		
7440-50-8	COPPER	1	67	1.2	J	
7439-89-6	IRON	2	26000	23		
7439-92-1	LEAD	2	440	0.7		
7439-95-4	MAGNESIUM	1	5900	120		
7439-96-5	MANGANESE	1	1100	1.2		
7440-02-0	NICKEL	1	12	2.3		
7440-09-7	POTASSIUM	1	1700	120		
7782-49-2	SELENIUM	2	1.6	1.2		
7440-22-4	SILVER	1	3.2	1.2	J	
7440-23-5	SODIUM	1	120	120	U	
7440-28-0	THALLIUM	2	2.3	2.3	U	
7440-62-2	VANADIUM	1	24	1.2		
7440-66-6	ZINC	2	1200	4.7		

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Data Package ID: IT0310174-1

Date Printed: Thursday, November 06, 2003

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Total ICP Metals

Method SW6010

Sample Results

Lab Name: Paragon Analytics, Inc.

Work Order Number: 0310174

Client Name: URS Operating Services, Inc.

ClientProject ID: Rico Argentine

Field ID: RA-AR-TP-1D1

Lab ID: 0310174-3

Sample Matrix: SOIL

% Moisture: 14.4

Date Collected: 16-Oct-03

Date Extracted: 03-Nov-03

Date Analyzed: 04-Nov-03

Prep Batch: IP031103-2

QCBatchID: IP031103-2-1

Run ID: IT031104-1A1

Cleanup: NONE

Basis: Dry Weight

Sample Allquot: 1g

Final Volume: 100 ml

Result Units: mg/kg

Clean DF: 1

File Name: TS31104

CASNO	Target Analyte	Dilution Factor	Result	Reporting Limit	Result Qualifier	EPA Qualifier
7429-90-5	ALUMINUM	1	8000	23		
7440-36-0	ANTIMONY	1	7.4	2.3	J	
7440-38-2	ARSENIC	1	38	1.2		
7440-39-3	BARIUM	1	290	12		
7440-41-7	BERYLLIUM	1	0.8	0.58		
7440-43-9	CADMIUM	3	9.4	1.8	J	
7440-70-2	CALCIUM	1	6500	120	J	
7440-47-3	CHROMIUM	1	9.7	1.2		
7440-48-4	COBALT	1	7.7	1.2		
7440-50-8	COPPER	1	310	1.2	J	
7439-89-6	IRON	3	40000	35		
7439-92-1	LEAD	3	2300	1.1		
7439-95-4	MAGNESIUM	1	3100	120		
7439-96-5	MANGANESE	3	3300	3.5		
7440-02-0	NICKEL	1	8.9	2.3		
7440-09-7	POTASSIUM	1	1600	120		
7782-49-2	SELENIUM	3	2.7	1.8		
7440-22-4	SILVER	1	10	1.2	J	
7440-23-5	SODIUM	1	120	120	U	
7440-28-0	THALLIUM	3	3.5	3.5	U	
7440-62-2	VANADIUM	1	20	1.2		
7440-66-6	ZINC	3	2600	7		

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Data Package ID: IT0310174-1

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Total ICP Metals

Method SW6010

Sample Results

Lab Name: Paragon Analytics, Inc.

Work Order Number: 0310174

Client Name: URS Operating Services, Inc.

ClientProject ID: Rico Argentine

Field ID: RA-AR-WI-1D1
Lab ID: 0310174-4

Sample Matrix: SOIL
% Moisture: 18.2
Date Collected: 16-Oct-03
Date Extracted: 03-Nov-03
Date Analyzed: 04-Nov-03

Prep Batch: IP031103-2
QCBatchID: IP031103-2-1
Run ID: IT031104-1A1
Cleanup: NONE
Basis: Dry Weight

Sample Aliquot: 1g
Final Volume: 100 ml
Result Units: mg/kg
Clean DF: 1
File Name: TS31104

CASNO	Target Analyte	Dilution Factor	Result	Reporting Limit	Result Qualifier	EPA Qualifier
7429-90-5	ALUMINUM	1	8000	24		
7440-36-0	ANTIMONY	1	2.5	2.4	J	
7440-38-2	ARSENIC	1	18	1.2		
7440-39-3	BARIUM	1	170	12		
7440-41-7	BERYLLIUM	1	0.65	0.61		
7440-43-9	CADMIUM	2	14	1.2	J	
7440-70-2	CALCIUM	1	3800	120	J	
7440-47-3	CHROMIUM	1	12	1.2		
7440-48-4	COBALT	1	6.3	1.2		
7440-50-8	COPPER	1	190	1.2	J	
7439-89-6	IRON	2	30000	24		
7439-92-1	LEAD	50	4400	18		
7439-95-4	MAGNESIUM	1	3600	120		
7439-96-5	MANGANESE	1	700	1.2		
7440-02-0	NICKEL	1	13	2.4		
7440-09-7	POTASSIUM	1	1400	120		
7782-49-2	SELENIUM	2	2	1.2		
7440-22-4	SILVER	1	7.2	1.2	J	
7440-23-5	SODIUM	1	120	120	U	
7440-28-0	THALLIUM	2	2.4	2.4	U	
7440-62-2	VANADIUM	1	23	1.2		
7440-66-6	ZINC	2	1600	4.9		

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Data Package ID: IT0310174-1

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Total ICP Metals

Method SW6010

Sample Results

Lab Name: Paragon Analytics, Inc.

Work Order Number: 0310174

Client Name: URS Operating Services, Inc.

ClientProject ID: Rico Argentine

Field ID: RA-CO-AD-1S2
Lab ID: 0310174-5

Sample Matrix: SOIL
% Moisture: 14.6
Date Collected: 20-Oct-03
Date Extracted: 03-Nov-03
Date Analyzed: 04-Nov-03

Prep Batch: IP031103-2
QCBatchID: IP031103-2-1
Run ID: IT031104-1A1
Cleanup: NONE
Basis: Dry Weight

Sample Aliquot: 1g
Final Volume: 100 ml
Result Units: mg/kg
Clean DF: 1
File Name: TS31104

CASNO	Target Analyte	Dilution Factor	Result	Reporting Limit	Result Qualifier	EPA Qualifier
7429-90-5	ALUMINUM	1	11000	23		
7440-36-0	ANTIMONY	1	2.5	2.3	J	
7440-38-2	ARSENIC	1	15	1.2		
7440-39-3	BARIUM	1	220	12		
7440-41-7	BERYLLIUM	1	0.92	0.59		
7440-43-9	CADMIUM	2	4.5	1.2	J	
7440-70-2	CALCIUM	1	5300	120	J	
7440-47-3	CHROMIUM	1	19	1.2		
7440-48-4	COBALT	1	7.9	1.2		
7440-50-8	COPPER	1	110	1.2	J	
7439-89-6	IRON	2	30000	23	J	
7439-92-1	LEAD	2	760	0.7	J	
7439-95-4	MAGNESIUM	1	5800	120		
7439-96-5	MANGANESE	2	1800	2.3		
7440-02-0	NICKEL	1	14	2.3		
7440-09-7	POTASSIUM	1	1800	120		
7782-49-2	SELENIUM	2	1.8	1.2		
7440-22-4	SILVER	1	7.6	1.2	J	
7440-23-5	SODIUM	1	120	120	U	
7440-28-0	THALLIUM	2	2.3	2.3	U	
7440-62-2	VANADIUM	1	27	1.2		
7440-66-6	ZINC	1	1000	2.3		

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Data Package ID: IT0310174-1

Total ICP Metals

Method SW6010

Sample Results

Lab Name: Paragon Analytics, Inc.

Work Order Number: 0310174

Client Name: URS Operating Services, Inc.

Client/Project ID: Rico Argentine

Field ID: RA-CO-JN-1S2
Lab ID: 0310174-6

Sample Matrix: SOIL
% Moisture: 10.2
Date Collected: 20-Oct-03
Date Extracted: 03-Nov-03
Date Analyzed: 04-Nov-03

Prep Batch: IP031103-2
QCBatchID: IP031103-2-1
Run ID: IT031104-1A1
Cleanup: NONE
Basis: Dry Weight

Sample Aliquot: 1g
Final Volume: 100 ml
Result Units: mg/kg
Clean DF: 1
File Name: TS31104

CASNO	Target Analyte	Dilution Factor	Result	Reporting Limit	Result Qualifier	EPA Qualifier
7429-90-5	ALUMINUM	1	10000	22		
7440-36-0	ANTIMONY	1	2.2	2.2	U US	
7440-38-2	ARSENIC	1	20	1.1		
7440-39-3	BARIUM	1	260	11		
7440-41-7	BERYLLIUM	1	0.94	0.56		
7440-43-9	CADMIUM	3	5.9	1.7	3	
7440-70-2	CALCIUM	1	4100	110	3	
7440-47-3	CHROMIUM	1	13	1.1		
7440-48-4	COBALT	1	9.5	1.1		
7440-50-8	COPPER	1	85	1.1	3	
7439-89-6	IRON	3	25000	33		
7439-92-1	LEAD	3	410	1		
7439-95-4	MAGNESIUM	1	4900	110		
7439-96-5	MANGANESE	3	2800	3.3		
7440-02-0	NICKEL	1	12	2.2		
7440-09-7	POTASSIUM	1	2100	110		
7782-49-2	SELENIUM	3	1.7	1.7	U	
7440-22-4	SILVER	1	1.1	1.1	3	
7440-23-5	SODIUM	1	110	110	U	
7440-28-0	THALLIUM	3	3.3	3.3	U	
7440-62-2	VANADIUM	1	25	1.1		
7440-86-6	ZINC	1	780	2.2		

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Data Package ID: IT0310174-1

Total ICP Metals

Method SW6010

Sample Results

Lab Name: Paragon Analytics, Inc.

Work Order Number: 0310174

Client Name: URS Operating Services, Inc.

ClientProject ID: Rico Argentine

Field ID: RA-CO-WH-1S2
Lab ID: 0310174-7

Sample Matrix: SOIL
% Moisture: 7.9
Date Collected: 20-Oct-03
Date Extracted: 03-Nov-03
Date Analyzed: 04-Nov-03

Prep Batch: IP031103-2
QCBatchID: IP031103-2-1
Run ID: IT031104-1A1
Cleanup: NONE
Basis: Dry Weight

Sample Aliquot: 1g
Final Volume: 100 ml
Result Units: mg/kg
Clean DF: 1
File Name: TS31104

CASNO	Target Analyte	Dilution Factor	Result	Reporting Limit	Result Qualifier	EPA Qualifier
7429-90-5	ALUMINUM	1	9500	22		
7440-36-0	ANTIMONY	1	2.2	2.2	U U3	
7440-38-2	ARSENIC	1	21	1.1		
7440-39-3	BARIUM	1	130	11		
7440-41-7	BERYLLIUM	1	0.82	0.54		
7440-43-9	CADMIUM	2	8.3	1.1	J	
7440-70-2	CALCIUM	1	5600	110	J	
7440-47-3	CHROMIUM	1	14	1.1		
7440-48-4	COBALT	1	8.8	1.1		
7440-50-8	COPPER	1	120	1.1	J	
7439-89-6	IRON	2	26000	22		
7439-92-1	LEAD	2	600	0.65		
7439-95-4	MAGNESIUM	1	6500	110		
7439-96-5	MANGANESE	2	1400	2.2		
7440-02-0	NICKEL	1	13	2.2		
7440-09-7	POTASSIUM	1	1400	110		
7782-49-2	SELENIUM	2	1.6	1.1		
7440-22-4	SILVER	1	2.3	1.1	J	
7440-23-5	SODIUM	1	110	110	U	
7440-28-0	THALLIUM	2	2.2	2.2	U	
7440-62-2	VANADIUM	1	22	1.1		
7440-66-6	ZINC	2	1300	4.3		

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Total ICP Metals

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Sample Results

Lab Name: Paragon Analytics, Inc.

Work Order Number: 0310174

Client Name: URS Operating Services, Inc.

ClientProject ID: Rico Argentine

Field ID: RA-GA-CN-1S2
Lab ID: 0310174-8

Sample Matrix: SOIL

% Moisture: 12.1

Date Collected: 21-Oct-03

Date Extracted: 03-Nov-03

Date Analyzed: 04-Nov-03

Prep Batch: IP031103-2

QCBatchID: IP031103-2-1

Run ID: IT031104-1A1

Cleanup: NONE

Basis: Dry Weight

Sample Allquot: 1g

Final Volume: 100 ml

Result Units: mg/kg

Clean DF: 1

File Name: TS31104

CASNO	Target Analyte	Dilution Factor	Result	Reporting Limit	Result Qualifier	EPA Qualifier
7429-90-5	ALUMINUM	1	13000	23		
7440-36-0	ANTIMONY	1	2.7	2.3	3	
7440-38-2	ARSENIC	1	17	1.1		
7440-39-3	BARIUM	1	100	11		
7440-41-7	BERYLLIUM	1	0.92	0.57		
7440-43-9	CADMIUM	2	22	1.1	3	
7440-70-2	CALCIUM	1	6300	110	3	
7440-47-3	CHROMIUM	1	16	1.1		
7440-48-4	COBALT	1	11	1.1		
7440-50-8	COPPER	1	210	1.1	3	
7439-89-6	IRON	2	34000	23		
7439-92-1	LEAD	2	1400	0.68		
7439-95-4	MAGNESIUM	1	6900	110		
7439-96-5	MANGANESE	2	1900	2.3		
7440-02-0	NICKEL	1	21	2.3		
7440-09-7	POTASSIUM	1	1700	110		
7782-49-2	SELENIUM	2	2.1	1.1		
7440-22-4	SILVER	1	4	1.1	3	
7440-23-5	SODIUM	1	110	110	U	
7440-28-0	THALLIUM	2	2.3	2.3	U	
7440-62-2	VANADIUM	1	27	1.1		
7440-66-6	ZINC	50	5700	110		

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Data Package ID: IT0310174-1

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Total ICP Metals

Method SW6010

Sample Results

Lab Name: Paragon Analytics, Inc.

Work Order Number: 0310174

Client Name: URS Operating Services, Inc.

Client/Project ID: Rico Argentine

Field ID: RA-GA-GA-1S2
Lab ID: 0310174-9

Sample Matrix: SOIL
% Moisture: 12.7
Date Collected: 16-Oct-03
Date Extracted: 03-Nov-03
Date Analyzed: 04-Nov-03

Prep Batch: IP031103-2
QCBatchID: IP031103-2-1
Run ID: IT031104-1A1
Cleanup: NONE
Basis: Dry Weight

Sample Aliquot: 1g
Final Volume: 100ml
Result Units: mg/kg
Clean DF: 1
File Name: TS31104

CASNO	Target Analyte	Dilution Factor	Result	Reporting Limit	Result Qualifier	EPA Qualifier
7429-90-5	ALUMINUM	1	10000	23		
7440-36-0	ANTIMONY	1	4	2.3	3	
7440-38-2	ARSENIC	1	11	1.1		
7440-39-3	BARIUM	1	110	11		
7440-41-7	BERYLLIUM	1	0.69	0.57		
7440-43-9	CADMIUM	2	7.5	1.1	3	
7440-70-2	CALCIUM	1	3800	110	3	
7440-47-3	CHROMIUM	1	16	1.1		
7440-48-4	COBALT	1	8.2	1.1		
7440-50-8	COPPER	1	110	1.1	3	
7439-89-6	IRON	2	27000	23		
7439-92-1	LEAD	2	610	0.69		
7439-95-4	MAGNESIUM	1	5800	110		
7439-96-5	MANGANESE	1	1000	1.1		
7440-02-0	NICKEL	1	14	2.3		
7440-09-7	POTASSIUM	1	1400	110		
7782-49-2	SELENIUM	2	1.4	1.1		
7440-22-4	SILVER	1	2	1.1	3	
7440-23-5	SODIUM	1	110	110	U	
7440-28-0	THALLIUM	2	2.3	2.3	U	
7440-62-2	VANADIUM	1	25	1.1		
7440-66-6	ZINC	2	1500	4.6		

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Data Package ID: IT0310174-1

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Total ICP Metals

Method SW6010

Sample Results

Lab Name: Paragon Analytics, Inc.

Work Order Number: 0310174

Client Name: URS Operating Services, Inc.

Client Project ID: Rico Argentine

Field ID: RA-GA-HO-1S2
Lab ID: 0310174-10

Sample Matrix: SOIL
% Moisture: 7.4
Date Collected: 21-Oct-03
Date Extracted: 03-Nov-03
Date Analyzed: 04-Nov-03

Prep Batch: IP031103-2
QCBatchID: IP031103-2-1
Run ID: IT031104-1A1
Cleanup: NONE
Basis: Dry Weight

Sample Aliquot: 1g
Final Volume: 100 ml
Result Units: mg/kg
Clean DF: 1
File Name: TS31104

CASNO	Target Analyte	Dilution Factor	Result	Reporting Limit	Result Qualifier	EPA Qualifier
7429-90-5	ALUMINUM	1	8300	22		
7440-36-0	ANTIMONY	1	2.2	2.2	U US	
7440-38-2	ARSENIC	1	8.7	1.1		
7440-39-3	BARIUM	1	130	11		
7440-41-7	BERYLLIUM	1	0.69	0.54		
7440-43-9	CADMIUM	1	2.8	0.54	3	
7440-70-2	CALCIUM	1	4000	110	3	
7440-47-3	CHROMIUM	1	12	1.1		
7440-48-4	COBALT	1	7.6	1.1		
7440-50-8	COPPER	1	39	1.1	3	
7439-89-6	IRON	1	19000	11		
7439-92-1	LEAD	1	310	0.32		
7439-95-4	MAGNESIUM	1	4400	110		
7439-96-5	MANGANESE	1	1100	1.1		
7440-02-0	NICKEL	1	11	2.2		
7440-09-7	POTASSIUM	1	1400	110		
7782-49-2	SELENIUM	1	1.5	0.54		
7440-22-4	SILVER	1	1.1	1.1	U US	
7440-23-5	SODIUM	1	110	110	U	
7440-28-0	THALLIUM	1	1.1	1.1	U	
7440-62-2	VANADIUM	1	20	1.1		
7440-66-6	ZINC	1	390	2.2		

Data Package ID: IT0310174-1

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Total ICP Metals

Method SW6010

Sample Results

Lab Name: Paragon Analytics, Inc.

Work Order Number: 0310174

Client Name: URS Operating Services, Inc.

ClientProject ID: Rico Argentine

Field ID: RA-HA-RB-05
Lab ID: 0310174-11

Sample Matrix: SOIL
% Moisture: 19
Date Collected: 20-Oct-03
Date Extracted: 03-Nov-03
Date Analyzed: 04-Nov-03

Prep Batch: IP031103-2
QCBatchID: IP031103-2-1
Run ID: IT031104-1A1
Cleanup: NONE
Basis: Dry Weight

Sample Aliquot: 1g
Final Volume: 100 ml
Result Units: mg/kg
Clean DF: 1
File Name: TS31104

CASNO	Target Analyte	Dilution Factor	Result	Reporting Limit	Result Qualifier	EPA Qualifier
7429-90-5	ALUMINUM	1	8500	25		
7440-36-0	ANTIMONY	1	7.8	2.5	5	
7440-38-2	ARSENIC	1	62	1.2		
7440-39-3	BARIUM	1	120	12		
7440-41-7	BERYLLIUM	1	0.77	0.62		
7440-43-9	CADMIUM	5	130	3.1	5	
7440-70-2	CALCIUM	1	4500	120	3	
7440-47-3	CHROMIUM	1	15	1.2		
7440-48-4	COBALT	1	7.6	1.2		
7440-50-8	COPPER	5	1500	6.2	5	
7439-89-6	IRON	5	71000	62		
7439-92-1	LEAD	50	26000	19		
7439-95-4	MAGNESIUM	1	6600	120		
7439-96-5	MANGANESE	1	800	1.2		
7440-02-0	NICKEL	1	11	2.5		
7440-09-7	POTASSIUM	1	1900	120		
7782-49-2	SELENIUM	5	4.8	3.1		
7440-22-4	SILVER	1	51	1.2	5	
7440-23-5	SODIUM	1	120	120	U	
7440-28-0	THALLIUM	5	6.2	6.2	U	
7440-62-2	VANADIUM	1	24	1.2		
7440-66-6	ZINC	50	18000	120		

Data Package ID: IT0310174-1

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Total ICP Metals

Method SW6010

Sample Results

Lab Name: Paragon Analytics, Inc.

Work Order Number: 0310174

Client Name: URS Operating Services, Inc.

Client/Project ID: Rico Argentine

Field ID: RA-HA-RB-06
Lab ID: 0310174-12

Sample Matrix: SOIL
% Moisture: 6.2
Date Collected: 20-Oct-03
Date Extracted: 03-Nov-03
Date Analyzed: 04-Nov-03

Prep Batch: IP031103-2
QCBatchID: IP031103-2-1
Run ID: IT031104-1A1
Cleanup: NONE
Basis: Dry Weight

Sample Aliquot: 1g
Final Volume: 100 ml
Result Units: mg/kg
Clean DF: 1
File Name: TS31104

CASNO	Target Analyte	Dilution Factor	Result	Reporting Limit	Result Qualifier	EPA Qualifier
7429-90-5	ALUMINUM	1	4700	21		
7440-36-0	ANTIMONY	1	4.9	2.1	5	
7440-38-2	ARSENIC	1	28	1.1		
7440-39-3	BARIUM	1	110	11	miss	
7440-41-7	BERYLLIUM	1	0.6	0.53	5	
7440-43-9	CADMIUM	5	4.1	2.7	5	
7440-70-2	CALCIUM	1	1600	110	5	
7440-47-3	CHROMIUM	1	7.4	1.1		
7440-48-4	COBALT	1	5.8	1.1		
7440-50-8	COPPER	1	240	1.1	5	
7439-89-6	IRON	5	57000	53		
7439-92-1	LEAD	5	1600	1.6		
7439-95-4	MAGNESIUM	1	2700	110		
7439-96-5	MANGANESE	1	400	1.1		
7440-02-0	NICKEL	1	8.3	2.1		
7440-09-7	POTASSIUM	1	920	110		
7782-49-2	SELENIUM	5	3.2	2.7		
7440-22-4	SILVER	1	7.6	1.1	5	
7440-23-5	SODIUM	1	110	110	U	
7440-28-0	THALLIUM	5	5.3	5.3	U	
7440-62-2	VANADIUM	1	17	1.1		
7440-66-6	ZINC	1	650	2.1		

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Data Package ID: IT0310174-1

Total ICP Metals

Method SW6010

Sample Results

Lab Name: Paragon Analytics, Inc.

Work Order Number: 0310174

Client Name: URS Operating Services, Inc.

Client Project ID: Rico Argentine

Field ID: RA-HA-RB-07
Lab ID: 0310174-13

Sample Matrix: SOIL
% Moisture: 15
Date Collected: 20-Oct-03
Date Extracted: 03-Nov-03
Date Analyzed: 04-Nov-03

Prep Batch: IP031103-2
QCBatchID: IP031103-2-1
Run ID: IT031104-1A1
Cleanup: NONE
Basis: Dry Weight

Sample Allquot: 1 g
Final Volume: 100 ml
Result Units: mg/kg
Clean DF: 1
File Name: TS31104

CASNO	Target Analyte	Dilution Factor	Result	Reporting Limit	Result Qualifier	EPA Qualifier
7429-90-5	ALUMINUM	1	5200	24		
7440-36-0	ANTIMONY	1	3.7	2.4	J	
7440-38-2	ARSENIC	1	13	1.2		
7440-39-3	BARIIUM	1	76	12		
7440-41-7	BERYLLIUM	1	0.59	0.59	U	
7440-43-9	CADMIUM	3	13	1.8	J	
7440-70-2	CALCIUM	1	2600	120	J	
7440-47-3	CHROMIUM	1	11	1.2		
7440-48-4	COBALT	1	2.9	1.2		
7440-50-8	COPPER	1	160	1.2	J	
7439-89-6	IRON	3	39000	35		
7439-92-1	LEAD	3	2400	1.1		
7439-95-4	MAGNESIUM	1	2600	120		
7439-96-5	MANGANESE	1	100	1.2		
7440-02-0	NICKEL	1	5.3	2.4		
7440-09-7	POTASSIUM	1	1800	120		
7782-49-2	SELENIUM	3	1.8	1.8	U	
7440-22-4	SILVER	1	15	1.2	J	
7440-23-5	SODIUM	1	120	120	U	
7440-28-0	THALLIUM	3	3.5	3.5	U	
7440-62-2	VANADIUM	1	20	1.2		
7440-66-6	ZINC	3	2000	7.1		

Data Package ID: IT0310174-1

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Total ICP Metals

Method SW6010

Sample Results

Lab Name: Paragon Analytics, Inc.

Work Order Number: 0310174

Client Name: URS Operating Services, Inc.

ClientProject ID: Rico Argentine

Field ID: RA-HA-RB-08
Lab ID: 0310174-14

Sample Matrix: SOIL
% Moisture: 7.7
Date Collected: 20-Oct-03
Date Extracted: 03-Nov-03
Date Analyzed: 04-Nov-03

Prep Batch: IP031103-2
QCBatchID: IP031103-2-1
Run ID: IT031104-1A1
Cleanup: NONE
Basis: Dry Weight

Sample Allquot: 1g
Final Volume: 100 ml
Result Units: mg/kg
Clean DF: 1
File Name: TS31104

CASNO	Target Analyte	Dilution Factor	Result	Reporting Limit	Result Qualifier	EPA Qualifier
7429-90-5	ALUMINUM	1	14000	22		
7440-36-0	ANTIMONY	1	7.8	2.2	3	
7440-38-2	ARSENIC	1	100	1.1		
7440-39-3	BARIUM	1	92	11		
7440-41-7	BERYLLIUM	1	1.2	0.54		
7440-43-9	CADMIUM	10	16	5.4	3	
7440-70-2	CALCIUM	1	34000	110	3	
7440-47-3	CHROMIUM	1	26	1.1		
7440-48-4	COBALT	1	4.9	1.1		
7440-50-8	COPPER	1	750	1.1	3	
7439-89-6	IRON	10	110000	110		
7439-92-1	LEAD	10	3000	3.3		
7439-95-4	MAGNESIUM	1	6200	110		
7439-96-5	MANGANESE	1	320	1.1		
7440-02-0	NICKEL	1	8.8	2.2		
7440-09-7	POTASSIUM	1	5300	110		
7782-49-2	SELENIUM	10	5.4	5.4	U	
7440-22-4	SILVER	1	24	1.1	3	
7440-23-5	SODIUM	1	230	110		
7440-28-0	THALLIUM	10	11	11	U	
7440-62-2	VANADIUM	1	35	1.1		
7440-66-6	ZINC	10	2600	22		

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Data Package ID: IT0310174-1

Total ICP Metals

Method SW6010

Sample Results

Lab Name: Paragon Analytics, Inc.

Work Order Number: 0310174

Client Name: URS Operating Services, Inc.

ClientProject ID: Rico Argentine

Field ID: RA-HA-RB-09
Lab ID: 0310174-15

Sample Matrix: SOIL
% Moisture: 11.5
Date Collected: 20-Oct-03
Date Extracted: 03-Nov-03
Date Analyzed: 04-Nov-03

Prep Batch: IP031103-2
QCBatchID: IP031103-2-1
Run ID: IT031104-1A1
Cleanup: NONE
Basis: Dry Weight

Sample Aliquot: 1g
Final Volume: 100ml
Result Units: mg/kg
Clean DF: 1
File Name: TS31104

CASNO	Target Analyte	Dilution Factor	Result	Reporting Limit	Result Qualifier	EPA Qualifier
7429-90-5	ALUMINUM	1	5200	23		
7440-36-0	ANTIMONY	1	5.7	2.3	J	
7440-38-2	ARSENIC	1	16	1.1		
7440-39-3	BARIUM	1	73	11		
7440-41-7	BERYLLIUM	1	0.56	0.56	U	
7440-43-9	CADMIUM	2	16	1.1	J	
7440-70-2	CALCIUM	1	2300	110	J	
7440-47-3	CHROMIUM	1	12	1.1		
7440-48-4	COBALT	1	3.4	1.1		
7440-50-8	COPPER	1	150	1.1	J	
7439-89-6	IRON	2	31000	23		
7439-92-1	LEAD	50	5400	17		
7439-95-4	MAGNESIUM	1	3800	110		
7439-96-5	MANGANESE	1	140	1.1		
7440-02-0	NICKEL	1	7.3	2.3		
7440-09-7	POTASSIUM	1	1400	110		
7782-49-2	SELENIUM	2	1.6	1.1		
7440-22-4	SILVER	1	17	1.1	J	
7440-23-5	SODIUM	1	110	110	U	
7440-28-0	THALLIUM	2	2.3	2.3	U	
7440-62-2	VANADIUM	1	22	1.1		
7440-66-6	ZINC	2	1300	4.5		

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Data Package ID: IT0310174-1

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Total ICP Metals

Method SW6010

Sample Results

Lab Name: Paragon Analytics, Inc.

Work Order Number: 0310174

Client Name: URS Operating Services, Inc.

ClientProject ID: Rico Argentine

Field ID: RA-HA-RO-1S1
Lab ID: 0310174-16

Sample Matrix: SOIL
% Moisture: 10.4
Date Collected: 16-Oct-03
Date Extracted: 03-Nov-03
Date Analyzed: 04-Nov-03

Prep Batch: IP031103-2
QCBatchID: IP031103-2-1
Run ID: IT031104-1A1
Cleanup: NONE
Basis: Dry Weight

Sample Aliquot: 1g
Final Volume: 100ml
Result Units: mg/kg
Clean DF: 1
File Name: TS31104

CASNO	Target Analyte	Dilution Factor	Result	Reporting Limit	Result Qualifier	EPA Qualifier
7429-90-5	ALUMINUM	1	8300	22		
7440-36-0	ANTIMONY	1	3	2.2	J	
7440-38-2	ARSENIC	1	41	1.1		
7440-39-3	BARIUM	1	110	11		
7440-41-7	BERYLLIUM	1	1.3	0.56		
7440-43-9	CADMIUM	5	43	2.8	J	
7440-70-2	CALCIUM	1	5900	110	J	
7440-47-3	CHROMIUM	1	50	1.1		
7440-48-4	COBALT	1	18	1.1		
7440-50-8	COPPER	1	740	1.1	J	
7439-89-6	IRON	5	65000	56		
7439-92-1	LEAD	5	5400	1.7		
7439-95-4	MAGNESIUM	1	6300	110		
7439-96-5	MANGANESE	5	1900	5.6		
7440-02-0	NICKEL	1	21	2.2		
7440-09-7	POTASSIUM	1	1300	110		
7782-49-2	SELENIUM	5	2.8	2.8	U	
7440-22-4	SILVER	1	16	1.1	J	
7440-23-5	SODIUM	1	110	110	U	
7440-28-0	THALLIUM	5	5.6	5.6	U	
7440-62-2	VANADIUM	1	23	1.1		
7440-66-6	ZINC	50	5800	110		

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Total ICP Metals

Method SW6010

Sample Results

Lab Name: Paragon Analytics, Inc.

Work Order Number: 0310174

Client Name: URS Operating Services, Inc.

ClientProject ID: Rico Argentine

Field ID: RA-HY-FS-D1
Lab ID: 0310174-17

Sample Matrix: SOIL
% Moisture: 19.4
Date Collected: 20-Oct-03
Date Extracted: 03-Nov-03
Date Analyzed: 04-Nov-03

Prep Batch: IP031103-2
QCBatchID: IP031103-2-1
Run ID: IT031104-1A1
Cleanup: NONE
Basis: Dry Weight

Sample Allquot: 1g
Final Volume: 100 ml
Result Units: mg/kg
Clean DF: 1
File Name: TS31104

CASNO	Target Analyte	Dilution Factor	Result	Reporting Limit	Result Qualifier	EPA Qualifier
7429-90-5	ALUMINUM	1	8700	25		
7440-36-0	ANTIMONY	1	2.5	2.5	U US	
7440-38-2	ARSENIC	1	13	1.2		
7440-39-3	BARIUM	1	140	12		
7440-41-7	BERYLLIUM	1	0.74	0.62		
7440-43-9	CADMIUM	1	7.1	0.62	J	
7440-70-2	CALCIUM	1	4600	120	J	
7440-47-3	CHROMIUM	1	12	1.2		
7440-48-4	COBALT	1	6.9	1.2		
7440-50-8	COPPER	1	19	1.2	J	
7439-89-6	IRON	1	21000	12		
7439-92-1	LEAD	1	52	0.37		
7439-95-4	MAGNESIUM	1	3800	120		
7439-96-5	MANGANESE	1	740	1.2		
7440-02-0	NICKEL	1	10	2.5		
7440-09-7	POTASSIUM	1	2000	120		
7782-49-2	SELENIUM	1	1.5	0.62		
7440-22-4	SILVER	1	1.2	1.2	U US	
7440-23-5	SODIUM	1	120	120	U	
7440-28-0	THALLIUM	1	1.2	1.2	U	
7440-62-2	VANADIUM	1	22	1.2		
7440-66-6	ZINC	5	2100	12		

Data Package ID: IT0310174-1

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Total ICP Metals

Method SW6010

Sample Results

Lab Name: Paragon Analytics, Inc.

Work Order Number: 0310174

Client Name: URS Operating Services, Inc.

Client/Project ID: Rico Argentine

Field ID: RA-PK-MI-101
Lab ID: 0310174-18

Sample Matrix: SOIL
% Moisture: 16.2
Date Collected: 19-Oct-03
Date Extracted: 03-Nov-03
Date Analyzed: 04-Nov-03

Prep Batch: IP031103-2
QCBatchID: IP031103-2-1
Run ID: IT031104-1A1
Cleanup: NONE
Basis: Dry Weight

Sample Aliquot: 1g
Final Volume: 100ml
Result Units: mg/kg
Clean DF: 1
File Name: TS31104

CASNO	Target Analyte	Dilution Factor	Result	Reporting Limit	Result Qualifier	EPA Qualifier
7429-90-5	ALUMINUM	1	13000	24		
7440-36-0	ANTIMONY	1	2.4	2.4	U US	
7440-38-2	ARSENIC	1	9.1	1.2		
7440-39-3	BARIUM	1	130	12		
7440-41-7	BERYLLIUM	1	0.9	0.6		
7440-43-9	CADMIUM	2	1.5	1.2	3	
7440-70-2	CALCIUM	1	5800	120	3	
7440-47-3	CHROMIUM	1	19	1.2		
7440-48-4	COBALT	1	12	1.2		
7440-50-8	COPPER	1	74	1.2	5	
7439-89-6	IRON	2	26000	24		
7439-92-1	LEAD	2	99	0.72		
7439-95-4	MAGNESIUM	1	5700	120		
7439-96-5	MANGANESE	2	1400	2.4		
7440-02-0	NICKEL	1	14	2.4		
7440-09-7	POTASSIUM	1	2300	120		
7782-49-2	SELENIUM	2	1.2	1.2	U	
7440-22-4	SILVER	1	1.2	1.2	U US	
7440-23-5	SODIUM	1	120	120	U	
7440-28-0	THALLIUM	2	2.4	2.4	U	
7440-62-2	VANADIUM	1	33	1.2		
7440-66-6	ZINC	1	310	2.4		

Data Package ID: IT0310174-1

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Total ICP Metals

Method SW6010

Sample Results

Lab Name: Paragon Analytics, Inc.

Work Order Number: 0310174

Client Name: URS Operating Services, Inc.

Client/Project ID: Rico Argentine

Field ID: RA-RH-FE-1D1
Lab ID: 0310174-19

Sample Matrix: SOIL

% Moisture: 18.1

Date Collected: 16-Oct-03

Date Extracted: 03-Nov-03

Date Analyzed: 04-Nov-03

Prep Batch: IP031103-2

QCBatchID: IP031103-2-1

Run ID: IT031104-1A1

Cleanup: NONE

Basis: Dry Weight

Sample Aliquot: 1g

Final Volume: 100ml

Result Units: mg/kg

Clean DF: 1

File Name: TS31104

CASNO	Target Analyte	Dilution Factor	Result	Reporting Limit	Result Qualifier	EPA Qualifier
7429-90-5	ALUMINUM	1	9300	24		
7440-36-0	ANTIMONY	1	2.4	2.4	U US	
7440-38-2	ARSENIC	1	17	1.2		
7440-39-3	BARIUM	1	190	12		
7440-41-7	BERYLLIUM	1	1	0.61		
7440-43-9	CADMIUM	2	2.9	1.2	J	
7440-70-2	CALCIUM	1	5300	120	J	
7440-47-3	CHROMIUM	1	14	1.2		
7440-48-4	COBALT	1	9.6	1.2		
7440-50-8	COPPER	1	55	1.2	J	
7439-89-6	IRON	2	26000	24		
7439-92-1	LEAD	2	240	0.73		
7439-95-4	MAGNESIUM	1	4500	120		
7439-96-5	MANGANESE	1	1200	1.2		
7440-02-0	NICKEL	1	15	2.4		
7440-09-7	POTASSIUM	1	1800	120		
7782-49-2	SELENIUM	2	1.6	1.2		
7440-22-4	SILVER	1	2.4	1.2	J	
7440-23-5	SODIUM	1	120	120	U	
7440-28-0	THALLIUM	2	2.4	2.4	U	
7440-62-2	VANADIUM	1	26	1.2		
7440-66-6	ZINC	1	480	2.4		

Data Package ID: IT0310174-1

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Total ICP Metals

Method SW6010

Sample Results

Lab Name: Paragon Analytics, Inc.

Work Order Number: 0310174

Client Name: URS Operating Services, Inc.

Client/Project ID: Rico Argentine

Field ID: RA-RI-GS-1S3
Lab ID: 0310174-20

Sample Matrix: SOIL
% Moisture: 18.6
Date Collected: 19-Oct-03
Date Extracted: 03-Nov-03
Date Analyzed: 04-Nov-03

Prep Batch: IP031103-2
QCBatchID: IP031103-2-1
Run ID: IT031104-1A1
Cleanup: NONE
Basis: Dry Weight

Sample Allquot: 1g
Final Volume: 100 ml
Result Units: mg/kg
Clean DF: 1
File Name: TS31104

CASNO	Target Analyte	Dilution Factor	Result	Reporting Limit	Result Qualifier	EPA Qualifier
7429-90-5	ALUMINUM	1	13000	25		
7440-36-0	ANTIMONY	1	2.5	2.5	U US	
7440-38-2	ARSENIC	1	9.5	1.2		
7440-39-3	BARIUM	1	230	12		
7440-41-7	BERYLLIUM	1	0.81	0.61		
7440-43-9	CADMIUM	2	5.3	1.2	3	
7440-70-2	CALCIUM	1	6900	120	3	
7440-47-3	CHROMIUM	1	19	1.2		
7440-48-4	COBALT	1	7.5	1.2		
7440-50-8	COPPER	1	74	1.2	3	
7439-89-6	IRON	2	24000	25		
7439-92-1	LEAD	2	700	0.74		
7439-95-4	MAGNESIUM	1	9100	120		
7439-96-5	MANGANESE	2	1800	2.5		
7440-02-0	NICKEL	1	13	2.5		
7440-09-7	POTASSIUM	1	2100	120		
7782-49-2	SELENIUM	2	2.2	1.2		
7440-22-4	SILVER	1	2.5	1.2	3	
7440-23-5	SODIUM	1	120	120	U	
7440-28-0	THALLIUM	2	2.5	2.5	U	
7440-62-2	VANADIUM	1	26	1.2		
7440-66-6	ZINC	1	880	2.5		

Data Package ID: IT0310174-1

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Total MERCURY

Method SW7471

Sample Results

Lab Name: Paragon Analytics, Inc.

Client Name: URS Operating Services, Inc.

Client Project ID: Rico Argentine

Work Order Number: 0310174

Reporting Basis: Dry Weight

Final Volume: 100 ml

Matrix: SOIL

Result Units: mg/kg

Client Sample ID	Lab ID	Date Collected	Date Prepared	Date Analyzed	Percent Moisture	Dilution Factor	Result	Reporting Limit	Flag	Sample Aliquot
RA-AR-CA-1D1	0310174-1	10/16/2003	10/29/2003	10/30/2003	8.4	1	0.11	0.11	U	0.6 g
RA-AR-SC-1S2	0310174-2	10/16/2003	10/29/2003	10/30/2003	14	5	1.8	0.58		0.6 g
RA-AR-TP-1D1	0310174-3	10/16/2003	10/29/2003	10/30/2003	14.4	1	0.27	0.12		0.6 g
RA-AR-WI-1D1	0310174-4	10/16/2003	10/29/2003	10/30/2003	18.2	1	0.63	0.12		0.6 g
RA-CO-AD-1S2	0310174-5	10/20/2003	10/29/2003	10/30/2003	14.6	1	0.85	0.12		0.6 g
RA-CO-JN-1S2	0310174-6	10/20/2003	10/29/2003	10/30/2003	10.2	1	0.11	0.11	U	0.6 g
RA-CO-WH-1S2	0310174-7	10/20/2003	10/29/2003	10/30/2003	7.9	1	0.11	0.11	U	0.6 g
RA-GA-CN-1S2	0310174-8	10/21/2003	10/29/2003	10/30/2003	12.1	1	0.11	0.11	U	0.6 g
RA-GA-GA-1S2	0310174-9	10/16/2003	10/29/2003	10/30/2003	12.7	1	0.11	0.11	U	0.6 g
RA-GA-HO-1S2	0310174-10	10/21/2003	10/29/2003	10/30/2003	7.4	1	0.11	0.11	U	0.6 g
RA-HA-RB-05	0310174-11	10/20/2003	10/29/2003	10/30/2003	19	1	0.17	0.12		0.6 g
RA-HA-RB-06	0310174-12	10/20/2003	10/29/2003	10/30/2003	6.2	1	0.22	0.11		0.6 g
RA-HA-RB-07	0310174-13	10/20/2003	10/29/2003	10/30/2003	15	1	0.12	0.12	U	0.6 g
RA-HA-RB-08	0310174-14	10/20/2003	10/29/2003	10/30/2003	7.7	1	0.11	0.11	U	0.6 g
RA-HA-RB-09	0310174-15	10/20/2003	10/29/2003	10/30/2003	11.5	1	0.32	0.11		0.6 g
RA-HA-RO-1S1	0310174-16	10/16/2003	10/29/2003	10/30/2003	10.4	1	0.86	0.11		0.6 g
RA-HY-FS-01	0310174-17	10/20/2003	10/29/2003	10/30/2003	19.4	1	0.12	0.12	U	0.6 g
RA-PK-MI-1D1	0310174-18	10/19/2003	10/29/2003	10/30/2003	16.2	1	0.12	0.12	U	0.6 g

Comments:

1. ND or U = Not Detected at or above the client requested detection limit.

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Total MERCURY

Method SW7471

Sample Results

Lab Name: Paragon Analytics, Inc.

Client Name: URS Operating Services, Inc.

Client Project ID: Rico Argentine

Work Order Number: 0310174

Reporting Basis: Dry Weight

Final Volume: 100 ml

Matrix: SOIL

Result Units: mg/kg

Client Sample ID	Lab ID	Date Collected	Date Prepared	Date Analyzed	Percent Moisture	Dilution Factor	Result	Reporting Limit	Flag	Sample Allquot
RA-RI-FE-1D1	0310174-19	10/16/2003	10/29/2003	10/30/2003	18.1	5	2.2	0.81		0.6 g
RA-RI-GS-1S3	0310174-20	10/19/2003	10/29/2003	10/30/2003	18.8	1	0.54	0.12		0.6 g

Comments:

1. ND or U = Not Detected at or above the client requested detection limit.

Data Package ID: HG0310174-1

Date Printed: Thursday, November 06, 2003

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CYANIDE, TOTAL

Method SW9014

Sample Results

Lab Name: Paragon Analytics, Inc.

Client Name: URS Operating Services, Inc.

Client Project ID: Rico Argentine

Work Order Number: 0310174

Reporting Basis: Dry Weight

Final Volume: 50 ml

Matrix: SOIL

Result Units: mg/kg

Client Sample ID	Lab ID	Date Collected	Date Prepared	Date Analyzed	Percent Moisture	Dilution Factor	Result	Reporting Limit	Flag	Sample Aliquot
RA-AR-CA-1D1	0310174-1	10/16/2003	10/27/2003	10/27/2003	8.4	1	0.55	0.55	U	1g
RA-AR-SC-1S2	0310174-2	10/16/2003	10/27/2003	10/27/2003	14	1	0.58	0.58	U	1g
RA-AR-TP-1D1	0310174-3	10/16/2003	10/27/2003	10/27/2003	14.4	1	0.58	0.58	U	1g
RA-AR-WI-1D1	0310174-4	10/16/2003	10/27/2003	10/27/2003	18.2	1	0.96	0.81		1g
RA-CO-AD-1S2	0310174-5	10/20/2003	10/29/2003	10/29/2003	14.6	1	0.99	0.59		1g
RA-CO-JN-1S2	0310174-6	10/20/2003	10/29/2003	10/29/2003	10.2	1	0.67	0.56		1g
RA-CO-WH-1S2	0310174-7	10/20/2003	10/29/2003	10/29/2003	7.9	1	0.54	0.54	U	1g
RA-GA-CN-1S2	0310174-8	10/21/2003	10/29/2003	10/29/2003	12.1	1	0.57	0.57	U	1g
RA-GA-GA-1S2	0310174-9	10/16/2003	10/27/2003	10/27/2003	12.7	1	0.57	0.57	U	1g
RA-GA-HO-1S2	0310174-10	10/21/2003	10/29/2003	10/29/2003	7.4	1	0.54	0.54	U	1g
RA-HA-RB-05	0310174-11	10/20/2003	10/29/2003	10/29/2003	19	1	2	0.62		1g
RA-HA-RB-06	0310174-12	10/20/2003	10/29/2003	10/29/2003	6.2	1	0.53	0.53	U	1g
RA-HA-RB-07	0310174-13	10/20/2003	10/29/2003	10/29/2003	15	1	0.59	0.59	U	1g
RA-HA-RB-08	0310174-14	10/20/2003	10/29/2003	10/29/2003	7.7	1	0.76	0.54		1g
RA-HA-RB-09	0310174-15	10/20/2003	10/29/2003	10/29/2003	11.5	1	0.57	0.57	U	1g
RA-HA-RO-1S1	0310174-16	10/16/2003	10/27/2003	10/27/2003	10.4	1	0.56	0.56	U	1g
RA-HY-FS-D1	0310174-17	10/20/2003	10/29/2003	10/29/2003	19.4	1	0.62	0.62	U	1g
RA-PK-MI-1D1	0310174-18	10/19/2003	10/27/2003	10/27/2003	16.2	1	0.6	0.6	U	1g

Comments:

1. ND or U = Not Detected at or above the client requested detection limit.

Data Package ID: CN0310174-1

Date Printed: Wednesday, November 05, 2003

Paragon Analytics Inc.

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CYANIDE, TOTAL

Method SW9014

Sample Results

Lab Name: Paragon Analytics, Inc.
Client Name: URS Operating Services, Inc.
Client Project ID: Rico Argentine
Work Order Number: 0310174
Reporting Basis: Dry Weight

Final Volume: 50 ml
Matrix: SOIL
Result Units: mg/kg

Client Sample ID	Lab ID	Date Collected	Date Prepared	Date Analyzed	Percent Moisture	Dilution Factor	Result	Reporting Limit	Flag	Sample Allquot
RA-RI-FE-1D1	0310174-19	10/16/2003	10/27/2003	10/27/2003	18.1	1	0.81	0.81	U	1g
RA-RI-GS-1S3	0310174-20	10/19/2003	10/27/2003	10/27/2003	18.6	1	0.73	0.81		1g

Comments:

1. ND or U = Not Detected at or above the client requested detection limit.

Data Package ID: CN0310174-1

Date Printed: Wednesday, November 05, 2003

Paragon Analytics Inc.

LIMS Version: 4.224B

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**REGION VIII
DATA VALIDATION REPORT
INORGANIC**

TDD No.	Site Name		Operable Unit
0308-0013	Rico Argentine		
RPM/OSC Name			
Luke Chavez			
Contractor Laboratory	Contract No.	SDG No.	Laboratory DPO/Region
Paragon Analytics, Inc.	NA	0311167	

Review Assigned Date December 09, 2003 Data Validator Mark McDaniel
 Review Completion Date December 10, 2003

Station Number	Laboratory ID	Matrix	Analysis
RAARCR1D1	0311167-1	Soil	Total metals by SW-846 method 6010B
RACOAD1D1	0311167-2		
RACOCA1D1	0311167-3		
RAGACN1D1	0311167-4		
RAGADO1D1	0311167-5		
RAGAEN1D1	0311167-6		
RAHARE1D1	0311167-7		
RAHARO1D1	0311167-8		
RASHCO1D1	0311167-9		
RASOBO1D1	0311167-10		
RASVCN1D1	0311167-11		
RASVCN2D1	0311167-12		
RASVFO2D1	0311167-13		
RAYEMU1D1	0311167-14		

DATA QUALITY STATEMENT

- (X) Data are ACCEPTABLE according to EPA Functional guidelines with no qualifiers (flags) added by the reviewer.
- () Data are UNACCEPTABLE according to EPA Functional Guidelines.
- () Data are acceptable with QUALIFICATIONS noted in review.

Telephone/Communication Logs Enclosed? Yes ___ No X

TPO Attention Required? Yes _____ No X If yes, list the items that require attention:

INORGANIC DATA QUALITY ASSURANCE REVIEW

REVIEW NARRATIVE SUMMARY

This data package was reviewed according to "USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Data Review," February 1994, modified for the methods used.

Raw data were reviewed for completeness and transcription accuracy onto the summary forms. Approximately 10-20% of the results reported in each of the samples, calibrations, and QC analyses were recalculated and verified. If problems were identified during the recalculation of results, a more thorough calculation check was performed.

SDG No. 0311167 consisted of 14 soil samples for total metals by 6010B.

The following table lists the data qualifiers added to the sample analyses. Please see Data Qualifier Definitions, attached to the end of this report.

Sample ID	Elements	Qualifiers	Reason for Qualification	Review Section
None	None	None	None	None

Method/SOW Number 6010B

Revision _____

Inorganic Deliverables Completeness Checklist

- P Inorganic Cover Page
- P Inorganic Analysis Data Sheets
- P Initial Calibration and Calibration Verification Results
- P Continuing Calibration Verification Results
- P CRDL Standard for ICP and AA
- P Blank Analysis Results
- P ICP Interference Check Sample Results
- P Spiked Sample Results
- P Post-digest Spiked Sample Analysis
- R Duplicate Sample Results
- NP Instrument Detection Limits
- P Laboratory Control Sample Results
- P Standard Addition Results
- P ICP Serial Dilution Results
- NA Holding Times Summary Sheet
- P ICP Interelement Correction Factors
- P ICP Linear Ranges
- P Raw Data
 - P Samples P Calibration Standards
 - P Duplicates NA ICP QC (ICS and Serial Dilution)
 - NA Cr6 P Mercury Analysis
- P Percent Solids Calculations - Solids Only
- P Sample Prep/Digestion Logs (Form XIII)
- P Analysis Run Log (Form XIV)
- P Chain-of-Custody
- P Sample Description
- P Case Narrative
- P Method References

- P Blanks P Spikes
- P LCS
- P Cyanide Analysis

KEY:

- P = Provided in original data package, as required by the SOW
- R = Provided as Resubmission
- NP = Not provided in original data package or as resubmission
- NR = Not required under the SOW
- NA = Not applicable to this data package or analysis

I. DELIVERABLES

All deliverables were present as specified in the Statement of Work.

Yes ___ No X

Comments: The laboratory provided QA/QC summary reports, however, these summary reports are not considered CLP equivalent forms.

II. HOLDING TIMES AND PRESERVATION CRITERIA

All holding times and preservation criteria were met.

Yes ___ No X

Comments: Temperature of samples upon receipt was ambient. The preservation requirements are 4°C(±2°C). No action is required.

III. INSTRUMENT CALIBRATIONS: STANDARDS AND BLANKS

Initial instrument calibrations were performed according to requirements.

Yes X No ___

Comments: None.

The instruments were calibrated daily and each time an analysis run was performed.

Yes X No ___

Comments: None.

The instruments were calibrated using one blank and the appropriate number of standards.

Yes X No ___

Comments: None.

IV. FORM 1 - SAMPLE ANALYSIS RESULTS

Sample analyses were entered correctly on Form Is.

Yes X No ___

Comments: None.

V. FORM 2A - INITIAL AND CONTINUING CALIBRATION VERIFICATION

The initial and continuing calibration verification standards (ICV and CCV, respectively) met requirements.

Yes X No ___

Comments: None.

The continuing calibration standards were run at 10% frequency.

Yes X No ___

Comments: Continuing calibration blanks were run every 10 samples.

VI. FORM 2B - CRDL STANDARD FOR ICP AND AA

ICP Analysis: Standards (CRI) at two times the CRDL or the IDL (whichever were greater) were analyzed at the beginning and the end of each sample run.

Yes X No ___ NA ___

Comments: None.

GFAA Analysis: Standards (CRA) at two times CRDL were analyzed at the beginning of each sample run.

Yes ___ No ___ NA X

Comments: Samples were not analyzed by GFAA.

The CRI and/or the CRA were analyzed after the ICV.

Yes X No ___

Comments: None.

VII. FORM 3 - BLANKS

The initial and continuing calibration blanks (ICB and CCB, respectively) met requirements.

Yes X No ___

Comments: None.

The continuing calibration blanks were run at 10% frequency.

Yes X No ___

Comments: Continuing calibration blanks were run every 10 samples.

A laboratory/preparation blank was run at the frequency of one per twenty samples, or per sample delivery group (whichever is more frequent), and for each matrix analyzed.

Yes X No ___

Comments: None.

All analyzed blanks were free of contamination.

Yes X No ___

Comments: None.

VIII. FORM 4 - ICP INTERFERENCE CHECK SAMPLE

The ICP interference check sample (ICS) was run twice per eight hour shift and/or at the beginning and end of each sample set analysis sequence (whichever is more frequent).

Yes X No ___ NA ___

Comments: None.

Percent recovery of the analytes in solution ICSAB were within the range of 80-120%.

Yes X No ___ NA ___

Comments: Potassium, and sodium were not included in the ICSAB analysis and were therefore not evaluated.

IX. FORM 5A - MATRIX SPIKE SAMPLE ANALYSIS

A matrix spike sample was analyzed with every twenty or fewer samples of a similar matrix, or one per sample delivery group (whichever is more frequent).

Yes___ No___ NA X

Comments: A sample from another SDG was selected for matrix QC.

The percent recoveries (%R) were calculated correctly.

$$\% \text{ Recovery} = \frac{(SSR - SR)}{SA} \times 100$$

SSR = spiked sample result
SR = sample result
SA = spike added

Yes___ No___ NA X

Comments: A sample from another SDG was selected for matrix QC.

Spike recoveries were within the range of 75-125% (an exception is granted where the sample concentration is four times the spike concentration).

Yes___ No___ NA X

Comments: A sample from another SDG was selected for matrix QC.

X. FORM 5B - POST DIGEST SPIKE RECOVERY

A post-digest spike was performed for those elements that did not meet the specified criteria (i.e., Pre-digestion/pre-distillation spike recovery falls outside of control limits and sample result is less than four times the spike amount added.).

Yes___ No___ Not Required X

Comments: A sample from another SDG was selected for matrix QC.

XI. FORM 6 - DUPLICATE SAMPLE ANALYSIS

Duplicate sample analysis was performed with every twenty or fewer samples of a similar matrix, or one per sample delivery group (whichever is more frequent).

Yes___ No___ NA X

Comments: A sample from another SDG was selected for matrix QC.

The RPDs were calculated correctly.

$$RPD = \frac{(S - D)}{(S + D)/2} \times 100$$

S = sample
D = duplicate

Yes___ No___ NA X

Comments: A sample from another SDG was selected for matrix QC.

For sample concentrations greater than five times the CRDL, RPDs were within ±20% (limits of ±35% apply for soil/sediments/tailings samples).

Yes___ No___ NA X

Comments: A sample from another SDG was selected for matrix QC.

For sample concentrations less than five times the CRDL, duplicate analysis results were within the control window of ± CRDL (two times CRDL for soils).

Yes___ No___ NA X

Comments: A sample from another SDG was selected for matrix QC.

XII. GFAA QC

Duplicate injections were performed on all GFAA samples and the RSD was within ± 20%.

Yes___ No___ NA X

Comments: GFAA analyses were not performed on these samples.

Analytical spikes were performed on all GFAA samples and the percent recovery was 85 - 115%.

Yes___ No___ NA X

Comments: None.

MSAs were analyzed when required and the correlation coefficient was > 0.995.

Yes___ No___ NA X

Comments: None.

XIII. FORM 7 - LABORATORY CONTROL SAMPLE

The laboratory control sample (LCS) was prepared and analyzed with every twenty or fewer samples of a similar matrix, or one per sample delivery group (whichever is more frequent).

Yes X No ___

Comments: None.

All results were within control limits.

Yes X No ___

Comments: None.

XIV. FORM 8 - STANDARD ADDITION RESULTS

Results from graphite furnace standard additions were entered on Form VIII as directed in the method.

Yes ___ No ___ NA X

Comments: None.

XV. FORM 9 - ICP QC

A serial dilution was performed for ICP analysis with every twenty or fewer samples of a similar matrix, or one per sample delivery group, whichever is more frequent.

Yes ___ No ___ NA X

Comments: A sample from another SDG was selected for matrix QC.

The serial dilution was without interference problems.

Yes ___ No ___ NA X

Comments: A sample from another SDG was selected for matrix QC.

XVI. FORM 10 - QUARTERLY INSTRUMENT DETECTION LIMITS (IDL)

IDLs were provided for all elements on the target analyte list.

Yes ___ No X

Comments: IDLs and MDLs were not provided.

Reported IDLs met requirements.

Yes ___ No X

Comments: Form 10 equivalent was not provided.

XVII. FORM 11 - INTERELEMENT CORRECTION FACTORS FOR ICP

Interelement corrections for ICP were reported.

Yes X No ___ NA ___

Comments: None.

XVIII. FORM 12 - ICP LINEAR RANGES

ICP linear ranges were reported.

Yes X No ___ NA ___

Comments: None.

XIX. LINEAR RANGE VERIFICATION ANALYSIS

Linear Range Verification Analysis (LRA) was performed and results were within control limits of $\pm 5\%$ of the true value.

Yes ___ No ___ NA X

Comments: None.

XX. FORM 13 - PREPARATION LOG

Information on the preparation of samples for analysis was reported on Form XIII.

Yes X No ___

Comments: None.

XXI. FORM 14 - ANALYSIS RUN LOG

A Form XIV with the required information was filled out for each analysis run in the data package.

Yes X No ___

Comments: None.

XXII. Additional Comments or Problems/Resolutions Not Addressed Above

Yes ___ No X

Comments: None.

INORGANIC DATA QUALITY ASSURANCE REVIEW**Region VIII****DATA QUALIFIER DEFINITIONS**

For the purpose of Data Validation, the following code letters and associated definitions are provided for use by the data validator to summarize the data quality. Use of additional qualifiers should be carefully considered. Definitions for all qualifiers used should be provided with each report.

GENERAL QUALIFIERS for use with both INORGANIC and ORGANIC DATA

- R - Reported value is "rejected." Resampling or reanalysis may be necessary to verify the presence or absence of the compound.
- J - The associated numerical value is an estimated quantity because the Quality Control criteria were not met.
- UJ - The reported amount is estimated because Quality Control criteria were not met. Element or compound was not detected.
- NJ - The analysis indicates the presence of an analyte that has been "tentatively identified" and the associated numerical value represents its approximate concentration.
- N - The analysis indicates the presence of an analyte for which there is presumptive evidence to make a tentative identification.
- U - The material was analyzed for, but was not-detected above the level of the associated value. The associated value is either the sample quantitation limit or the sample detection limit.

ACRONYMS

AA	Atomic Absorption
Ag	Silver
CCB	Continuing Calibration Blank
CCV	Continuing Calibration Verification
CFR	Code of Federal Regulations
CLP	Contract Laboratory Program
CRA	CRDL standard required for AA
CRDL	Contract Required Detection Limit
CRI	CRDL standard required for ICP
CV	Cold Vapor
EPA	U.S. Environmental Protection Agency
GFAA	Graphite Furnace Atomic Absorption
Hg	Mercury
ICB	Initial Calibration Blank
ICP	Inductively Coupled Plasma
ICS	Interference Check Sample
ICSA	Interference Check Sample (Solution A)
ICSAB	Interference Check Sample (Solution AB)
ICV	Initial Calibration Verification
IDL	Instrument Detection Limit
LCS	Laboratory Control Sample
LRA	Linear Range Verification Analysis
MSA	Method of Standard Additions
PDS	Post Digestion Spike
QC	Quality Control
RPD	Relative Percent Difference
RPM	Regional Project Manager
RSD	Percent Relative Standard Deviation
SA	Spike Added
SAS	Special Analytical Services
SDG	Sample Delivery Group
SOW	Statement of Work
SR	Sample Result
SSR	Spiked Sample Result
TPO	Technical Project Officer

Total ICP Metals

Method SW6010

Sample Results

Lab Name: Paragon Analytics, Inc.

Work Order Number: 0311167

Client Name: URS Operating Services, Inc.

ClientProject ID: Rico Argentine 36547730

Field ID: RAARCR1D1

Lab ID: 0311167-1

Sample Matrix: SOIL

% Moisture: 1

Date Collected: 15-Oct-03

Date Extracted: 25-Nov-03

Date Analyzed: 26-Nov-03

Prep Batch: IP031125-1

QC Batch ID: IP031125-1-4

Run ID: IT031126-1A1

Cleanup: NONE

Basis: Dry Weight

Sample Allquot: 1g

Final Volume: 100 ml

Result Units: mg/kg

Clean DF: 1

File Name: TS31126

CASNO	Target Analyte	Dilution Factor	Result	Reporting Limit	Result Qualifier	EPA Qualifier
7429-90-5	ALUMINUM	1	5800	20		
7440-36-0	ANTIMONY	1	2	2	U	
7440-38-2	ARSENIC	1	4.9	1		
7440-39-3	BARIUM	1	410	10		
7440-41-7	BERYLLIUM	1	0.51	0.51	U	
7440-43-9	CADMIUM	1	0.64	0.51		
7440-70-2	CALCIUM	1	6300	100		
7440-47-3	CHROMIUM	1	140	1		
7440-48-4	COBALT	1	5.6	1		
7440-50-8	COPPER	1	20	1		
7439-89-6	IRON	1	18000	10		
7439-92-1	LEAD	1	59	0.3		
7439-95-4	MAGNESIUM	1	4000	100		
7439-96-5	MANGANESE	1	750	1		
7440-02-0	NICKEL	1	12	2		
7440-09-7	POTASSIUM	1	710	100		
7782-49-2	SELENIUM	1	0.84	0.51		
7440-22-4	SILVER	1	1	1	U	
7440-23-5	SODIUM	1	170	100		
7440-28-0	THALLIUM	1	1	1	U	
7440-62-2	VANADIUM	1	24	1		
7440-66-6	ZINC	1	130	2		

Data Package ID: IT0311167-1

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Total ICP Metals

Method SW6010

Sample Results

Lab Name: Paragon Analytics, Inc.

Work Order Number: 0311167

Client Name: URS Operating Services, Inc.

ClientProject ID: Rico Argentine 36547730

Field ID: RACOAD101

Lab ID: 0311167-2

Sample Matrix: SOIL

% Moisture: 3.6

Date Collected: 20-Oct-03

Date Extracted: 25-Nov-03

Date Analyzed: 26-Nov-03

Prep Batch: IP031125-1

QCBatchID: IP031125-1-4

Run ID: IT031126-1A1

Cleanup: NONE

Basis: Dry Weight

Sample Allquot: 1g

Final Volume: 100 ml

Result Units: mg/kg

Clean DF: 1

File Name: TS31126

CASNO	Target Analyte	Dilution Factor	Result	Reporting Limit	Result Qualifier	EPA Qualifier
7429-90-5	ALUMINUM	1	12000	21		
7440-36-0	ANTIMONY	1	3	2.1		
7440-38-2	ARSENIC	1	18	1		
7440-39-3	BARIUM	1	260	10		
7440-41-7	BERYLLIUM	1	1	0.52		
7440-43-9	CADMIUM	2	6.2	1		
7440-70-2	CALCIUM	1	4900	100		
7440-47-3	CHROMIUM	1	20	1		
7440-48-4	COBALT	1	9.5	1		
7440-50-8	COPPER	1	130	1		
7439-89-6	IRON	2	30000	21		
7439-92-1	LEAD	2	890	0.62		
7439-95-4	MAGNESIUM	1	6100	100		
7439-96-5	MANGANESE	2	1800	2.1		
7440-02-0	NICKEL	1	15	2.1		
7440-09-7	POTASSIUM	1	1600	100		
7782-49-2	SELENIUM	2	2.3	1		
7440-22-4	SILVER	1	8.5	1		
7440-23-5	SODIUM	1	130	100		
7440-28-0	THALLIUM	2	2.1	2.1	U	
7440-62-2	VANADIUM	1	27	1		
7440-66-6	ZINC	2	1100	4.1		

Data Package ID: IT0311167-1

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Total ICP Metals

Method SW6010

Sample Results

Lab Name: Paragon Analytics, Inc.

Work Order Number: 0311167

Client Name: URS Operating Services, Inc.

Client Project ID: Rico Argentine 36547730

Field ID: RACOCA1D1

Lab ID: 0311167-3

Sample Matrix: SOIL

% Moisture: 2.3

Date Collected: 20-Oct-03

Date Extracted: 25-Nov-03

Date Analyzed: 26-Nov-03

Prep Batch: IP031125-1

QCBatchID: IP031125-1-4

Run ID: IT031126-1A1

Cleanup: NONE

Basis: Dry Weight

Sample Allquot: 1g

Final Volume: 100 ml

Result Units: mg/kg

Clean DF: 1

File Name: TS31126

CASNO	Target Analyte	Dilution Factor	Result	Reporting Limit	Result Qualifier	EPA Qualifier
7429-90-5	ALUMINUM	1	12000	20		
7440-36-0	ANTIMONY	1	2.7	2		
7440-38-2	ARSENIC	1	16	1		
7440-39-3	BARIUM	1	200	10		
7440-41-7	BERYLLIUM	1	0.93	0.51		
7440-43-9	CADMIUM	2	4.5	1		
7440-70-2	CALCIUM	1	4700	100		
7440-47-3	CHROMIUM	1	18	1		
7440-48-4	COBALT	1	8.5	1		
7440-50-8	COPPER	1	82	1		
7439-89-6	IRON	2	32000	20		
7439-92-1	LEAD	2	600	0.61		
7439-95-4	MAGNESIUM	1	6000	100		
7439-96-5	MANGANESE	2	1200	2		
7440-02-0	NICKEL	1	13	2		
7440-09-7	POTASSIUM	1	1500	100		
7782-49-2	SELENIUM	2	2.2	1		
7440-22-4	SILVER	1	2.9	1		
7440-23-5	SODIUM	1	110	100		
7440-28-0	THALLIUM	2	2	2	U	
7440-62-2	VANADIUM	1	27	1		
7440-66-6	ZINC	1	760	2		

Data Package ID: IT0311167-1

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Total ICP Metals

Method SW6010

Sample Results

Lab Name: Paragon Analytics, Inc.

Work Order Number: 0311167

Client Name: URS Operating Services, Inc.

ClientProject ID: Rico Argentine 36547730

Field ID: RAGACN1D1

Lab ID: 0311167-4

Sample Matrix: SOIL

% Moisture: 3

Date Collected: 21-Oct-03

Date Extracted: 25-Nov-03

Date Analyzed: 26-Nov-03

Prep Batch: IP031125-1

QCBatchID: IP031125-1-4

Run ID: IT031126-1A1

Cleanup: NONE

Basis: Dry Weight

Sample Aliquot: 1g

Final Volume: 100 ml

Result Units: mg/kg

Clean DF: 1

File Name: TS31126

CASNO	Target Analyte	Dilution Factor	Result	Reporting Limit	Result Qualifier	EPA Qualifier
7429-90-5	ALUMINUM	1	13000	21		
7440-36-0	ANTIMONY	1	2.1	2.1	U	
7440-38-2	ARSENIC	1	13	1		
7440-39-3	BARIUM	1	130	10		
7440-41-7	BERYLLIUM	1	0.97	0.52		
7440-43-9	CADMIUM	2	24	1		
7440-70-2	CALCIUM	1	8100	100		
7440-47-3	CHROMIUM	1	18	1		
7440-48-4	COBALT	1	10	1		
7440-50-8	COPPER	1	260	1		
7439-89-6	IRON	2	32000	21		
7439-92-1	LEAD	2	1300	0.62		
7439-95-4	MAGNESIUM	1	6400	100		
7439-96-5	MANGANESE	2	1900	2.1		
7440-02-0	NICKEL	1	19	2.1		
7440-09-7	POTASSIUM	1	1500	100		
7782-49-2	SELENIUM	2	2.4	1		
7440-22-4	SILVER	1	4.5	1		
7440-23-5	SODIUM	1	100	100	U	
7440-28-0	THALLIUM	2	2.1	2.1	U	
7440-62-2	VANADIUM	1	26	1		
7440-66-6	ZINC	50	5700	100		

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Data Package ID: IT0311167-1

Date Printed: Wednesday, December 03, 2003

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Total ICP Metals

Method SW6010

Sample Results

Lab Name: Paragon Analytics, Inc.

Work Order Number: 0311167

Client Name: URS Operating Services, Inc.

Client Project ID: Rico Argentine 36547730

Field ID: RAGADO1D1
Lab ID: 0311167-5

Sample Matrix: SOIL
% Moisture: 1.7
Date Collected: 21-Oct-03
Date Extracted: 25-Nov-03
Date Analyzed: 26-Nov-03

Prep Batch: IP031125-1
QCBatchID: IP031125-1-4
Run ID: IT031126-1A1
Cleanup: NONE
Basis: Dry Weight

Sample Allquot: 1g
Final Volume: 100ml
Result Units: mg/kg
Clean DF: 1
File Name: TS31126

CASNO	Target Analyte	Dilution Factor	Result	Reporting Limit	Result Qualifier	EPA Qualifier
7429-90-5	ALUMINUM	1	12000	20		
7440-36-0	ANTIMONY	1	2	2	U	
7440-38-2	ARSENIC	1	30	1		
7440-39-3	BARIUM	1	120	10		
7440-41-7	BERYLLIUM	1	0.97	0.51		
7440-43-9	CADMIUM	3	25	1.5		
7440-70-2	CALCIUM	1	5500	100		
7440-47-3	CHROMIUM	1	20	1		
7440-48-4	COBALT	1	11	1		
7440-50-8	COPPER	1	330	1		
7439-89-6	IRON	3	49000	31		
7439-92-1	LEAD	3	2900	0.92		
7439-95-4	MAGNESIUM	1	8100	100		
7439-96-5	MANGANESE	3	2100	3.1		
7440-02-0	NICKEL	1	16	2		
7440-09-7	POTASSIUM	1	1200	100		
7782-49-2	SELENIUM	3	2.7	1.5		
7440-22-4	SILVER	1	14	1		
7440-23-5	SODIUM	1	100	100	U	
7440-28-0	THALLIUM	3	3.1	3.1	U	
7440-62-2	VANADIUM	1	28	1		
7440-66-6	ZINC	50	3800	100		

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Data Package ID: IT0311167-1

Total ICP Metals

Method SW6010

Sample Results

Lab Name: Paragon Analytics, Inc.

Work Order Number: 0311167

Client Name: URS Operating Services, Inc.

ClientProject ID: Rico Argentine 36547730

Field ID: RAGAEN101

Lab ID: 0311187-6

Sample Matrix: SOIL

% Moisture: 2.6

Date Collected: 21-Oct-03

Date Extracted: 25-Nov-03

Date Analyzed: 26-Nov-03

Prep Batch: IP031125-1

QCBatchID: IP031125-1-4

Run ID: IT031126-1A1

Cleanup: NONE

Basis: Dry Weight

Sample Aliquot: 1 g

Final Volume: 100 ml

Result Units: mg/kg

Clean DF: 1

File Name: TS31126

CASNO	Target Analyte	Dilution Factor	Result	Reporting Limit	Result Qualifier	EPA Qualifier
7429-90-5	ALUMINUM	1	11000	21		
7440-36-0	ANTIMONY	1	2.1	2.1	U	
7440-38-2	ARSENIC	1	13	1		
7440-39-3	BARIUM	1	130	10		
7440-41-7	BERYLLIUM	1	0.73	0.51		
7440-43-9	CADMIUM	2	14	1		
7440-70-2	CALCIUM	1	7000	100		
7440-47-3	CHROMIUM	1	18	1		
7440-48-4	COBALT	1	8.2	1		
7440-50-8	COPPER	1	190	1		
7439-89-6	IRON	2	32000	21		
7439-92-1	LEAD	2	1500	0.62		
7439-95-4	MAGNESIUM	1	5200	100		
7439-96-5	MANGANESE	2	1200	2.1		
7440-02-0	NICKEL	1	13	2.1		
7440-09-7	POTASSIUM	1	1400	100		
7782-49-2	SELENIUM	2	2.3	1		
7440-22-4	SILVER	1	4.3	1		
7440-23-5	SODIUM	1	100	100	U	
7440-28-0	THALLIUM	2	2.1	2.1	U	
7440-62-2	VANADIUM	1	25	1		
7440-66-6	ZINC	50	3000	100		

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Data Package ID: IT0311167-1

Date Printed: Wednesday, December 03, 2003

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Total ICP Metals

Method SW6010

Sample Results

Lab Name: Paragon Analytics, Inc.

Work Order Number: 0311167

Client Name: URS Operating Services, Inc.

Client Project ID: Rico Argentine 36547730

Field ID: RAHARE1D1

Lab ID: 0311167-7

Sample Matrix: SOIL

% Moisture: 1.5

Date Collected: 16-Oct-03

Date Extracted: 25-Nov-03

Date Analyzed: 26-Nov-03

Prep Batch: IP031125-1

QCBatchID: IP031125-1-4

Run ID: IT031126-1A1

Cleanup: NONE

Basis: Dry Weight

Sample Aliquot: 1 g

Final Volume: 100 ml

Result Units: mg/kg

Clean DF: 1

File Name: TS31126

CASNO	Target Analyte	Dilution Factor	Result	Reporting Limit	Result Qualifier	EPA Qualifier
7429-90-5	ALUMINUM	1	8700	20		
7440-36-0	ANTIMONY	1	3.3	2		
7440-38-2	ARSENIC	1	21	1		
7440-39-3	BARIUM	1	100	10		
7440-41-7	BERYLLIUM	1	0.71	0.51		
7440-43-9	CADMIUM	2	21	1		
7440-70-2	CALCIUM	1	3000	100		
7440-47-3	CHROMIUM	1	14	1		
7440-48-4	COBALT	1	8.8	1		
7440-50-8	COPPER	1	410	1		
7439-89-6	IRON	2	34000	20		
7439-92-1	LEAD	50	4100	15		
7439-95-4	MAGNESIUM	1	4800	100		
7439-96-5	MANGANESE	2	1200	2		
7440-02-0	NICKEL	1	10	2		
7440-09-7	POTASSIUM	1	1300	100		
7782-49-2	SELENIUM	2	2.3	1		
7440-22-4	SILVER	1	16	1		
7440-23-5	SODIUM	1	100	100	U	
7440-28-0	THALLIUM	2	2	2	U	
7440-62-2	VANADIUM	1	22	1		
7440-66-6	ZINC	50	3100	100		

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Data Package ID: IT0311167-1

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Total ICP Metals

Method SW6010

Sample Results

Lab Name: Paragon Analytics, Inc.

Work Order Number: 0311167

Client Name: URS Operating Services, Inc.

ClientProject ID: Rico Argentine 36547730

Field ID: RAHARO1D1
Lab ID: 0311167-8

Sample Matrix: SOIL
% Moisture: 1.3
Date Collected: 16-Oct-03
Date Extracted: 25-Nov-03
Date Analyzed: 26-Nov-03

Prep Batch: IP031125-1
QCBatchID: IP031125-1-4
Run ID: IT031126-1A1
Cleanup: NONE
Basis: Dry Weight

Sample Aliquot: 1g
Final Volume: 100 ml
Result Units: mg/kg
Clean DF: 1
File Name: TS31126

CASNO	Target Analyte	Dilution Factor	Result	Reporting Limit	Result Qualifier	EPA Qualifier
7429-90-5	ALUMINUM	1	9800	20		
7440-36-0	ANTIMONY	1	3	2		
7440-38-2	ARSENIC	1	16	1		
7440-39-3	BARIUM	1	99	10		
7440-41-7	BERYLLIUM	1	1.1	0.51		
7440-43-9	CADMIUM	2	32	1		
7440-70-2	CALCIUM	1	14000	100		
7440-47-3	CHROMIUM	1	16	1		
7440-48-4	COBALT	1	10	1		
7440-50-8	COPPER	1	420	1		
7439-89-6	IRON	2	37000	20		
7439-92-1	LEAD	50	4300	15		
7439-95-4	MAGNESIUM	1	8500	100		
7439-96-5	MANGANESE	2	2000	2		
7440-02-0	NICKEL	1	12	2		
7440-09-7	POTASSIUM	1	1100	100		
7782-49-2	SELENIUM	2	2.2	1		
7440-22-4	SILVER	1	21	1		
7440-23-5	SODIUM	1	100	100	U	
7440-28-0	THALLIUM	2	2	2	U	
7440-62-2	VANADIUM	1	21	1		
7440-66-6	ZINC	50	4800	100		

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Data Package ID: IT0311167-1

Total ICP Metals

Method SW6010

Sample Results

Lab Name: Paragon Analytics, Inc.

Work Order Number: 0311167

Client Name: URS Operating Services, Inc.

Client Project ID: Rico Argentine 36547730

Field ID: RASHCO1D1

Lab ID: 0311167-9

Sample Matrix: SOIL

% Moisture: 2

Date Collected: 21-Oct-03

Date Extracted: 25-Nov-03

Date Analyzed: 26-Nov-03

Prep Batch: IP031125-1

QCBatchID: IP031125-1-4

Run ID: IT031126-1A1

Cleanup: NONE

Basis: Dry Weight

Sample Aliquot: 1g

Final Volume: 100 ml

Result Units: mg/kg

Clean DF: 1

File Name: TS31126

CASNO	Target Analyte	Dilution Factor	Result	Reporting Limit	Result Qualifier	EPA Qualifier
7429-90-5	ALUMINUM	1	14000	20		
7440-36-0	ANTIMONY	1	2	2	U	
7440-38-2	ARSENIC	1	15	1		
7440-39-3	BARIUM	1	84	10		
7440-41-7	BERYLLIUM	1	1	0.51		
7440-43-9	CADMIUM	2	28	1		
7440-70-2	CALCIUM	1	4900	100		
7440-47-3	CHROMIUM	1	21	1		
7440-48-4	COBALT	1	18	1		
7440-50-8	COPPER	1	220	1		
7439-89-6	IRON	2	35000	20		
7439-92-1	LEAD	2	1300	0.61		
7439-95-4	MAGNESIUM	1	7800	100		
7439-96-5	MANGANESE	2	1800	2		
7440-02-0	NICKEL	1	20	2		
7440-09-7	POTASSIUM	1	1400	100		
7782-49-2	SELENIUM	2	1.5	1		
7440-22-4	SILVER	1	4.8	1		
7440-23-5	SODIUM	1	130	100		
7440-28-0	THALLIUM	2	2	2	U	
7440-62-2	VANADIUM	1	27	1		
7440-66-6	ZINC	50	4000	100		

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Total ICP Metals

Method SW6010

Sample Results

Lab Name: Paragon Analytics, Inc.

Work Order Number: 0311167

Client Name: URS Operating Services, Inc.

Client/Project ID: Rico Argentine 36547730

Field ID: RAS0801D1

Lab ID: 0311167-10

Sample Matrix: SOIL

% Moisture: 2.7

Date Collected: 21-Oct-03

Date Extracted: 25-Nov-03

Date Analyzed: 26-Nov-03

Prep Batch: IP031125-1

QCBatchID: IP031125-1-4

Run ID: IT031126-1A1

Cleanup: NONE

Basis: Dry Weight

Sample Aliquot: 1g

Final Volume: 100 ml

Result Units: mg/kg

Clean DF: 1

File Name: TS31126

CASNO	Target Analyte	Dilution Factor	Result	Reporting Limit	Result Qualifier	EPA Qualifier
7429-90-5	ALUMINUM	1	11000	21		
7440-36-0	ANTIMONY	1	6.6	2.1		
7440-38-2	ARSENIC	1	21	1		
7440-39-3	BARIUM	1	120	10		
7440-41-7	BERYLLIUM	1	0.96	0.51		
7440-43-9	CADMIUM	3	15	1.5		
7440-70-2	CALCIUM	1	4700	100		
7440-47-3	CHROMIUM	1	16	1		
7440-48-4	COBALT	1	10	1		
7440-50-8	COPPER	1	180	1		
7439-89-6	IRON	3	30000	31		
7439-92-1	LEAD	3	1900	0.92		
7439-95-4	MAGNESIUM	1	6100	100		
7439-96-5	MANGANESE	3	2300	3.1		
7440-02-0	NICKEL	1	14	2.1		
7440-09-7	POTASSIUM	1	2000	100		
7782-49-2	SELENIUM	3	1.6	1.5		
7440-22-4	SILVER	1	16	1		
7440-23-5	SODIUM	1	100	100	U	
7440-28-0	THALLIUM	3	3.1	3.1	U	
7440-62-2	VANADIUM	1	26	1		
7440-66-6	ZINC	3	1900	6.2		

Data Package ID: IT0311167-1

Date Printed: Wednesday, December 03, 2003

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Total ICP Metals

Method SW6010

Sample Results

Lab Name: Paragon Analytics, Inc.

Work Order Number: 0311167

Client Name: URS Operating Services, Inc.

Client Project ID: Rico Argentine 36547730

Field ID: RASVCN1D1

Lab ID: 0311167-11

Sample Matrix: SOIL

% Moisture: 2.5

Date Collected: 21-Oct-03

Date Extracted: 25-Nov-03

Date Analyzed: 26-Nov-03

Prep Batch: IP031125-1

QC Batch ID: IP031125-1-4

Run ID: IT031126-1A1

Cleanup: NONE

Basis: Dry Weight

Sample Aliquot: 1g

Final Volume: 100ml

Result Units: mg/kg

Clean DF: 1

File Name: TS31126

CASNO	Target Analyte	Dilution Factor	Result	Reporting Limit	Result Qualifier	EPA Qualifier
7429-90-5	ALUMINUM	1	13000	21		
7440-36-0	ANTIMONY	1	2.1	2.1	U	
7440-38-2	ARSENIC	1	14	1		
7440-39-3	BARIUM	1	150	10		
7440-41-7	BERYLLIUM	1	0.97	0.51		
7440-43-9	CADMIUM	3	23	1.5		
7440-70-2	CALCIUM	1	6400	100		
7440-47-3	CHROMIUM	1	18	1		
7440-48-4	COBALT	1	10	1		
7440-50-8	COPPER	1	260	1		
7439-89-6	IRON	3	35000	31		
7439-92-1	LEAD	3	1900	0.92		
7439-95-4	MAGNESIUM	1	6800	100		
7439-96-5	MANGANESE	3	2100	3.1		
7440-02-0	NICKEL	1	16	2.1		
7440-09-7	POTASSIUM	1	1900	100		
7782-49-2	SELENIUM	3	1.5	1.5	U	
7440-22-4	SILVER	1	6.9	1		
7440-23-5	SODIUM	1	100	100	U	
7440-28-0	THALLIUM	3	3.1	3.1	U	
7440-62-2	VANADIUM	1	26	1		
7440-66-6	ZINC	50	4300	100		

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Data Package ID: IT0311167-1

Date Printed: Wednesday, December 03, 2003

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Total ICP Metals

Method SW6010

Sample Results

Lab Name: Paragon Analytics, Inc.

Work Order Number: 0311167

Client Name: URS Operating Services, Inc.

ClientProject ID: Rico Argentine 36547730

Field ID: RASVCN2D1

Lab ID: 0311167-12

Sample Matrix: SOIL

% Moisture: 2.8

Date Collected: 21-Oct-03

Date Extracted: 25-Nov-03

Date Analyzed: 26-Nov-03

Prep Batch: IP031125-1

QCBatchID: IP031125-1-4

Run ID: IT031126-1A1

Cleanup: NONE

Basis: Dry Weight

Sample Aliquot: 1g

Final Volume: 100ml

Result Units: mg/kg

Clean DF: 1

File Name: TS31126

CASNO	Target Analyte	Dilution Factor	Result	Reporting Limit	Result Qualifier	EPA Qualifier
7429-90-5	ALUMINUM	1	14000	21		
7440-36-0	ANTIMONY	1	2.1	2.1	U	
7440-38-2	ARSENIC	1	14	1		
7440-39-3	BARIUM	1	140	10		
7440-41-7	BERYLLIUM	1	0.96	0.51		
7440-43-9	CADMIUM	3	27	1.5		
7440-70-2	CALCIUM	1	6700	100		
7440-47-3	CHROMIUM	1	20	1		
7440-48-4	COBALT	1	10	1		
7440-50-8	COPPER	1	310	1		
7439-89-6	IRON	3	32000	31		
7439-92-1	LEAD	3	2800	0.93		
7439-95-4	MAGNESIUM	1	8100	100		
7439-96-5	MANGANESE	3	2300	3.1		
7440-02-0	NICKEL	1	16	2.1		
7440-09-7	POTASSIUM	1	2000	100		
7782-49-2	SELENIUM	3	3.2	1.5		
7440-22-4	SILVER	1	9.2	1		
7440-23-5	SODIUM	1	100	100	U	
7440-28-0	THALLIUM	3	3.1	3.1	U	
7440-62-2	VANADIUM	1	29	1		
7440-66-6	ZINC	50	4400	100		

Data Package ID: IT0311167-1

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Total ICP Metals

Method SW6010

Sample Results

Lab Name: Paragon Analytics, Inc.

Work Order Number: 0311167

Client Name: URS Operating Services, Inc.

Client Project ID: Rico Argentine 36547730

Field ID: RASVFOZD1

Lab ID: 0311167-13

Sample Matrix: SOIL

% Moisture: 8.8

Date Collected: 20-Oct-03

Date Extracted: 25-Nov-03

Date Analyzed: 26-Nov-03

Prep Batch: IP031125-1

QC Batch ID: IP031125-1-4

Run ID: IT031126-1A1

Cleanup: NONE

Basis: Dry Weight

Sample Allquot: 1g

Final Volume: 100 ml

Result Units: mg/kg

Clean DF: 1

File Name: TS31126

CASNO	Target Analyte	Dilution Factor	Result	Reporting Limit	Result Qualifier	EPA Qualifier
7429-90-5	ALUMINUM	1	9300	22		
7440-36-0	ANTIMONY	1	2.9	2.2		
7440-38-2	ARSENIC	1	13	1.1		
7440-39-3	BARIUM	1	290	11		
7440-41-7	BERYLLIUM	1	0.89	0.55		
7440-43-9	CADMIUM	1	24	0.55		
7440-70-2	CALCIUM	1	21000	110		
7440-47-3	CHROMIUM	1	14	1.1		
7440-48-4	COBALT	1	6.2	1.1		
7440-50-8	COPPER	1	110	1.1		
7439-89-6	IRON	1	21000	11		
7439-92-1	LEAD	2	1000	0.66		
7439-95-4	MAGNESIUM	1	4300	110		
7439-96-5	MANGANESE	2	1400	2.2		
7440-02-0	NICKEL	1	12	2.2		
7440-09-7	POTASSIUM	1	1800	110		
7782-49-2	SELENIUM	1	4.2	0.55		
7440-22-4	SILVER	1	5.3	1.1		
7440-23-5	SODIUM	1	110	110	U	
7440-28-0	THALLIUM	2	2.2	2.2	U	
7440-62-2	VANADIUM	1	19	1.1		
7440-66-6	ZINC	50	4000	110		

Data Package ID: IT0311167-1

Date Printed: Wednesday, December 03, 2003

Paragon Analytics Inc.

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Total ICP Metals

Method SW6010

Sample Results

Lab Name: Paragon Analytics, Inc.

Work Order Number: 0311167

Client Name: URS Operating Services, Inc.

Client Project ID: Rico Argentina 36547730

Field ID: RAYEMU1D1
Lab ID: 0311167-14

Sample Matrix: SOIL
% Moisture: 2.2
Date Collected: 21-Oct-03
Date Extracted: 25-Nov-03
Date Analyzed: 26-Nov-03

Prep Batch: IP031125-1
QCBatchID: IP031125-1-4
Run ID: IT031126-1A1
Cleanup: NONE
Basis: Dry Weight

Sample Aliquot: 1g
Final Volume: 100 ml
Result Units: mg/kg
Clean DF: 1
File Name: TS31126

CASNO	Target Analyte	Dilution Factor	Result	Reporting Limit	Result Qualifier	EPA Qualifier
7429-90-5	ALUMINUM	1	13000	20		
7440-36-0	ANTIMONY	1	2	2	U	
7440-38-2	ARSENIC	1	26	1		
7440-39-3	BARIUM	1	100	10		
7440-41-7	BERYLLIUM	1	0.94	0.51		
7440-43-9	CADMIUM	3	20	1.5		
7440-70-2	CALCIUM	1	4200	100		
7440-47-3	CHROMIUM	1	19	1		
7440-48-4	COBALT	1	11	1		
7440-50-8	COPPER	1	240	1		
7439-89-6	IRON	3	36000	31		
7439-92-1	LEAD	3	1800	0.92		
7439-95-4	MAGNESIUM	1	7100	100		
7439-96-5	MANGANESE	3	1600	3.1		
7440-02-0	NICKEL	1	16	2		
7440-09-7	POTASSIUM	1	1500	100		
7782-49-2	SELENIUM	3	1.5	1.5	U	
7440-22-4	SILVER	1	5.6	1		
7440-23-5	SODIUM	1	100	100	U	
7440-28-0	THALLIUM	3	3.1	3.1	U	
7440-62-2	VANADIUM	1	27	1		
7440-66-6	ZINC	50	3400	100		

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Data Package ID: IT0311167-1

**REGION VIII
DATA VALIDATION REPORT
INORGANIC**

TDD No.	Site Name		Operable Unit
0308-0013	Rico Argentine		
RPM/OSC Name			
Luke Chavez			
Contractor Laboratory	Contract No.	SDG No.	Laboratory DPO/Region
Paragon Analytics, Inc.	NA	0310176	

Review Assigned Date November 13, 2003 Data Validator Mark McDaniel
 Review Completion Date December 01, 2003

Station Number	Laboratory ID	Matrix	Analysis
RA-SO-02	0310176-1	Soil	Metals by SW-846 methods 6010B and 7471A. Total cyanide by SW-846 method 9014.
RA-SO-03	0310176-2		
RA-SO-04	0310176-3		
RA-SO-05	0310176-4		
RA-SO-06	0310176-5		
RA-SO-07	0310176-6		
RA-SO-09	0310176-7		
RA-SO-BO-1S1	0310176-8		
RA-SO-HE-1D1	0310176-9		
RA-SO-HE-1S2	0310176-10		
RA-SO-IR-1D1	0310176-11		
RA-SV-FO-2S2	0310176-12		

DATA QUALITY STATEMENT

- (X) Data are ACCEPTABLE according to EPA Functional guidelines with no qualifiers (flags) added by the reviewer.
- () Data are UNACCEPTABLE according to EPA Functional Guidelines.
- () Data are acceptable with QUALIFICATIONS noted in review.

Telephone/Communication Logs Enclosed? Yes _____ No X

TPO Attention Required? Yes _____ No X If yes, list the items that require attention:

INORGANIC DATA QUALITY ASSURANCE REVIEW**REVIEW NARRATIVE SUMMARY**

This data package was reviewed according to "USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Data Review," February 1994, modified for the methods used.

Raw data were reviewed for completeness and transcription accuracy onto the summary forms. Approximately 10-20% of the results reported in each of the samples, calibrations, and QC analyses were recalculated and verified. If problems were identified during the recalculation of results, a more thorough calculation check was performed.

SDG No. 0310175 consisted of 12 soil samples for TAL metals by 6010B, and 7471A, as well as total cyanide by 9014.

The following table lists the data qualifiers added to the sample analyses. Please see Data Qualifier Definitions, attached to the end of this report.

Sample ID	Elements	Qualifiers	Reason for Qualification	Review Section
None	None	None	None	None

Method/SOW Number 6010B, 7471A, 9014

Revision _____

Inorganic Deliverables Completeness Checklist

- P Inorganic Cover Page
- P Inorganic Analysis Data Sheets
- P Initial Calibration and Calibration Verification Results
- P Continuing Calibration Verification Results
- P CRDL Standard for ICP and AA
- P Blank Analysis Results
- P ICP Interference Check Sample Results
- P Spiked Sample Results
- P Post-digest Spiked Sample Analysis
- R Duplicate Sample Results
- NP Instrument Detection Limits
- P Laboratory Control Sample Results
- P Standard Addition Results
- P ICP Serial Dilution Results
- NA Holding Times Summary Sheet
- P ICP Interelement Correction Factors
- P ICP Linear Ranges
- P Raw Data
 - P Samples P Calibration Standards P Blanks P Spikes
 - P Duplicates P ICP QC (ICS and Serial Dilution) P LCS
 - NA Cr6 P Mercury Analysis P Cyanide Analysis
- P Percent Solids Calculations - Solids Only
- P Sample Prep/Digestion Logs (Form XIII)
- P Analysis Run Log (Form XIV)
- P Chain-of-Custody
- P Sample Description
- P Case Narrative
- P Method References

KEY:

- P = Provided in original data package, as required by the SOW
- R = Provided as Resubmission
- NP = Not provided in original data package or as resubmission
- NR = Not required under the SOW
- NA = Not applicable to this data package or analysis

I. DELIVERABLES

All deliverables were present as specified in the Statement of Work.

Yes No

Comments: The laboratory provided QA/QC summary reports, however, these summary reports are not considered CLP equivalent forms.

II. HOLDING TIMES AND PRESERVATION CRITERIA

All holding times and preservation criteria were met.

Yes No

Comments: Temperature of samples upon receipt was 16°C. The preservation requirements are 4°C(±2°C). No qualifications are necessary.

III. INSTRUMENT CALIBRATIONS: STANDARDS AND BLANKS

Initial instrument calibrations were performed according to requirements.

Yes No

Comments: None.

The instruments were calibrated daily and each time an analysis run was performed.

Yes No

Comments: None.

The instruments were calibrated using one blank and the appropriate number of standards.

Yes No

Comments: None.

IV. FORM 1 - SAMPLE ANALYSIS RESULTS

Sample analyses were entered correctly on Form Is.

Yes X No ___

Comments: None.

V. FORM 2A - INITIAL AND CONTINUING CALIBRATION VERIFICATION

The initial and continuing calibration verification standards (ICV and CCV, respectively) met requirements.

Yes X No ___

Comments: None.

The calibration verification results were within 90-110% recovery for metals, 80-120% for mercury, and 85-115% for cyanide.

Yes X No ___

Comments: None.

The continuing calibration standards were run at 10% frequency.

Yes X No ___

Comments: Continuing calibration blanks were run every 10 samples.

VI. FORM 2B - CRDL STANDARD FOR ICP AND AA

ICP Analysis: Standards (CRI) at two times the CRDL or the IDL (whichever were greater) were analyzed at the beginning and the end of each sample run.

Yes X No ___ NA ___

Comments: None.

GFAA Analysis: Standards (CRA) at two times CRDL were analyzed at the beginning of each sample run.

Yes ___ No ___ NA X

Comments: Samples were not analyzed by GFAA.

The CRI and/or the CRA were analyzed after the ICV.

Yes X No ___

Comments: None.

VII. FORM 3 - BLANKS

The initial and continuing calibration blanks (ICB and CCB, respectively) met requirements.

Yes X No ___

Comments: None.

The continuing calibration blanks were run at 10% frequency.

Yes X No ___

Comments: Continuing calibration blanks were run every 10 samples.

A laboratory/preparation blank was run at the frequency of one per twenty samples, or per sample delivery group (whichever is more frequent), and for each matrix analyzed.

Yes X No ___

Comments: None.

All analyzed blanks were free of contamination.

Yes ___ No X

Comments: The table below details elements exceeding criteria.

Element	Reason for Qualification	Matrix	Samples Affected	Qualifiers
Fe,Pb	CCB result exceeds CRQL. Sample result is greater than 10X CCB result.	Soil	All	None

VIII. FORM 4 - ICP INTERFERENCE CHECK SAMPLE

The ICP interference check sample (ICS) was run twice per eight hour shift and/or at the beginning and end of each sample set analysis sequence (whichever is more frequent).

Yes X No ___ NA ___

Comments: None.

Percent recovery of the analytes in solution ICSAB were within the range of 80-120%.

Yes X No ___ NA ___

Comments: Potassium, and sodium were not included in the ICSAB analysis and were therefore not evaluated.

IX. FORM 5A - MATRIX SPIKE SAMPLE ANALYSIS

A matrix spike sample was analyzed with every twenty or fewer samples of a similar matrix, or one per sample delivery group (whichever is more frequent).

Yes ___ No X

Comments: A sample from another SDG was selected for the 7471A & 6010B Analyses.

The percent recoveries (%R) were calculated correctly.

$$\% \text{ Recovery} = \frac{(SSR - SR)}{SA} \times 100$$

SSR = spiked sample result
 SR = sample result
 SA = spike added

Yes X No ___

Comments: None.

Spike recoveries were within the range of 75-125% (an exception is granted where the sample concentration is four times the spike concentration).

Yes X No

Comments: None.

X. FORM 5B - POST DIGEST SPIKE RECOVERY

A post-digest spike was performed for those elements that did not meet the specified criteria (i.e., Pre-digestion/pre-distillation spike recovery falls outside of control limits and sample result is less than four times the spike amount added.).

Yes No Not Required X

Comments: A sample from another SDG was selected for the 7471A & 6010B Analyses.

XI. FORM 6 - DUPLICATE SAMPLE ANALYSIS

Duplicate sample analysis was performed with every twenty or fewer samples of a similar matrix, or one per sample delivery group (whichever is more frequent).

Yes No X

Comments: A sample from another SDG was selected for the 7471A & 6010B Analyses.

The RPDs were calculated correctly.

$$RPD = \frac{(S - D)}{(S + D)/2} \times 100$$

S = sample
D = duplicate

Yes X No

Comments: None.

For sample concentrations greater than five times the CRDL, RPDs were within $\pm 20\%$ (limits of $\pm 35\%$ apply for soil/sediments/tailings samples).

Yes X No

Comments: None

For sample concentrations less than five times the CRDL, duplicate analysis results were within the control window of \pm CRDL (two times CRDL for soils).

Yes X No

Comments: None.

XII. GFAA QC

Duplicate injections were performed on all GFAA samples and the RSD was within \pm 20%.

Yes No NA X

Comments: GFAA analyses were not performed on these samples.

Analytical spikes were performed on all GFAA samples and the percent recovery was 85 - 115%.

Yes No NA X

Comments: None.

MSAs were analyzed when required and the correlation coefficient was > 0.995 .

Yes No NA X

Comments: None.

XIII. FORM 7 - LABORATORY CONTROL SAMPLE

The laboratory control sample (LCS) was prepared and analyzed with every twenty or fewer samples of a similar matrix, or one per sample delivery group (whichever is more frequent).

Yes X No

Comments: None.

All results were within control limits.

Yes X No

Comments: None.

XIV. FORM 8 - STANDARD ADDITION RESULTS

Results from graphite furnace standard additions were entered on Form VIII as directed in the method.

Yes___ No___ NA X

Comments: None.

XV. FORM 9 - ICP QC

A serial dilution was performed for ICP analysis with every twenty or fewer samples of a similar matrix, or one per sample delivery group, whichever is more frequent.

Yes___ No___ NA X

Comments: A sample from another SDG was selected for the 7471A & 6010B Analyses.

The serial dilution was without interference problems.

Yes___ No___ NA X

Comments: A sample from another SDG was selected for the 7471A & 6010B Analyses.

XVI. FORM 10 - QUARTERLY INSTRUMENT DETECTION LIMITS (IDL)

IDLs were provided for all elements on the target analyte list.

Yes___ No X

Comments: IDLs and MDLs were not provided.

Reported IDLs met requirements.

Yes___ No X

Comments: Form 10 equivalent was not provided.

XVII. FORM 11 - INTERELEMENT CORRECTION FACTORS FOR ICP

Interelement corrections for ICP were reported.

Yes X No ___ NA ___

Comments: None.

XVIII. FORM 12 - ICP LINEAR RANGES

ICP linear ranges were reported.

Yes X No ___ NA ___

Comments: None.

XIX. LINEAR RANGE VERIFICATION ANALYSIS

Linear Range Verification Analysis (LRA) was performed and results were within control limits of $\pm 5\%$ of the true value.

Yes ___ No ___ NA X

Comments: None.

XX. FORM 13 - PREPARATION LOG

Information on the preparation of samples for analysis was reported on Form XIII.

Yes X No ___

Comments: None.

XXI. FORM 14 - ANALYSIS RUN LOG

A Form XIV with the required information was filled out for each analysis run in the data package.

Yes X No ___

Comments: None.

XXII. Additional Comments or Problems/Resolutions Not Addressed Above

Yes No

Comments: None.

INORGANIC DATA QUALITY ASSURANCE REVIEW**Region VIII****DATA QUALIFIER DEFINITIONS**

For the purpose of Data Validation, the following code letters and associated definitions are provided for use by the data validator to summarize the data quality. Use of additional qualifiers should be carefully considered. Definitions for all qualifiers used should be provided with each report.

GENERAL QUALIFIERS for use with both INORGANIC and ORGANIC DATA

- R** - Reported value is "rejected." Resampling or reanalysis may be necessary to verify the presence or absence of the compound.
- J** - The associated numerical value is an estimated quantity because the Quality Control criteria were not met.
- UJ** - The reported amount is estimated because Quality Control criteria were not met. Element or compound was not detected.
- NJ** - The analysis indicates the presence of an analyte that has been "tentatively identified" and the associated numerical value represents its approximate concentration.
- N** - The analysis indicates the presence of an analyte for which there is presumptive evidence to make a tentative identification.
- U** - The material was analyzed for, but was not-detected above the level of the associated value. The associated value is either the sample quantitation limit or the sample detection limit.

ACRONYMS

AA	Atomic Absorption
Ag	Silver
CCB	Continuing Calibration Blank
CCV	Continuing Calibration Verification
CFR	Code of Federal Regulations
CLP	Contract Laboratory Program
CRA	CRDL standard required for AA
CRDL	Contract Required Detection Limit
CRI	CRDL standard required for ICP
CV	Cold Vapor
EPA	U.S. Environmental Protection Agency
GFAA	Graphite Furnace Atomic Absorption
Hg	Mercury
ICB	Initial Calibration Blank
ICP	Inductively Coupled Plasma
ICS	Interference Check Sample
ICSA	Interference Check Sample (Solution A)
ICSAB	Interference Check Sample (Solution AB)
ICV	Initial Calibration Verification
IDL	Instrument Detection Limit
LCS	Laboratory Control Sample
LRA	Linear Range Verification Analysis
MSA	Method of Standard Additions
PDS	Post Digestion Spike
QC	Quality Control
RPD	Relative Percent Difference
RPM	Regional Project Manager
RSD	Percent Relative Standard Deviation
SA	Spike Added
SAS	Special Analytical Services
SDG	Sample Delivery Group
SOW	Statement of Work
SR	Sample Result
SSR	Spiked Sample Result
TPO	Technical Project Officer

CYANIDE, TOTAL

Method SW9014

Sample Results

Lab Name: Paragon Analytics, Inc.
Client Name: URS Operating Services, Inc.
Client Project ID: Rico Argentine
Work Order Number: 0310176
Reporting Basis: Dry Weight

Final Volume: 50 ml
Matrix: SOIL
Result Units: mg/kg

Client Sample ID	Lab ID	Date Collected	Date Prepared	Date Analyzed	Percent Moisture	Dilution Factor	Result	Reporting Limit	Flag	Sample Aliquot
RA-SO-02	0310176-1	10/21/2003	11/03/2003	11/03/2003	9.5	1	0.55	0.55	U	1 g
RA-SO-03	0310176-2	10/21/2003	11/03/2003	11/03/2003	27.4	1	2.1	0.69		1 g
RA-SO-04	0310176-3	10/21/2003	11/03/2003	11/03/2003	35.3	1	0.77	0.77	U	1 g
RA-SO-05	0310176-4	10/21/2003	11/03/2003	11/03/2003	11.9	1	0.57	0.57	U	1 g
RA-SO-06	0310176-5	10/21/2003	11/03/2003	11/03/2003	6.7	1	0.54	0.54	U	1 g
RA-SO-07	0310176-6	10/21/2003	11/03/2003	11/03/2003	3.4	1	0.52	0.52	U	1 g
RA-SO-09	0310176-7	10/22/2003	11/03/2003	11/03/2003	13.2	1	0.58	0.58	U	1 g
RA-SO-BO-1S1	0310176-8	10/21/2003	11/03/2003	11/03/2003	11.3	1	0.56	0.56	U	1 g
RA-SO-HE-1D1	0310176-9	10/20/2003	10/30/2003	10/30/2003	10.2	1	0.56	0.56	U	1 g
RA-SO-HE-1S2	0310176-10	10/20/2003	10/30/2003	10/30/2003	9.5	1	0.55	0.55	U	1 g
RA-SO-IR-1D1	0310176-11	10/21/2003	10/30/2003	10/30/2003	18.6	1	0.61	0.61	U	1 g
RA-SV-FO-2S2	0310176-12	10/20/2003	11/03/2003	11/03/2003	26.9	1	1.5	0.66		1 g

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Comments:

1. ND or U = Not Detected at or above the client requested detection limit.

Data Package ID: CN0310176-1

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Total ICP Metals

Method SW6010

Sample Results

Lab Name: Paragon Analytics, Inc.

Work Order Number: 0310176

Client Name: URS Operating Services, Inc.

ClientProject ID: Rico Argentine

Field ID: RA-SO-02

Lab ID: 0310176-1

Sample Matrix: SOIL

% Moisture: 9.5

Date Collected: 21-Oct-03

Date Extracted: 30-Oct-03

Date Analyzed: 30-Oct-03

Prep Batch: IP031030-1

QCBatchID: IP031030-1-2

Run ID: IT031030-1A1

Cleanup: NONE

Basis: Dry Weight

Sample Allquot: 1 g

Final Volume: 100 ml

Result Units: mg/kg

Clean DF: 1

File Name: TS31030

CASNO	Target Analyte	Dilution Factor	Result	Reporting Limit	Result Qualifier	EPA Qualifier
7429-90-5	ALUMINUM	1	14000	22		
7440-36-0	ANTIMONY	1	2.6	2.2		
7440-38-2	ARSENIC	1	19	1.1		
7440-39-3	BARIUM	1	120	11		
7440-41-7	BERYLLIUM	1	0.71	0.55		
7440-43-9	CADMIUM	5	2.8	2.8	U	
7440-70-2	CALCIUM	1	2800	110		
7440-47-3	CHROMIUM	1	28	1.1		
7440-48-4	COBALT	1	8.6	1.1		
7440-50-8	COPPER	1	360	1.1		
7439-89-6	IRON	5	64000	55		
7439-92-1	LEAD	5	370	1.7		
7439-95-4	MAGNESIUM	1	13000	110		
7439-96-5	MANGANESE	1	490	1.1		
7440-02-0	NICKEL	1	22	2.2		
7440-09-7	POTASSIUM	1	1900	110		
7782-49-2	SELENIUM	5	2.8	2.8	U	
7440-22-4	SILVER	1	2.8	1.1		
7440-23-5	SODIUM	1	110	110	U	
7440-28-0	THALLIUM	5	5.5	5.5	U	
7440-62-2	VANADIUM	1	29	1.1		
7440-66-6	ZINC	1	380	2.2		

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Data Package ID: IT0310176-1

Date Printed: Thursday, November 06, 2003

Paragon Analytics Inc.

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Total ICP Metals

Method SW6010

Sample Results

Lab Name: Paragon Analytics, Inc.

Work Order Number: 0310176

Client Name: URS Operating Services, Inc.

Client Project ID: Rico Argentine

Field ID: RA-SO-03
Lab ID: 0310176-2

Sample Matrix: SOIL
% Moisture: 27.4
Date Collected: 21-Oct-03
Date Extracted: 30-Oct-03
Date Analyzed: 30-Oct-03

Prep Batch: IP031030-1
QCBatchID: IP031030-1-2
Run ID: IT031030-1A1
Cleanup: NONE
Basis: Dry Weight

Sample Aliquot: 1g
Final Volume: 100 ml
Result Units: mg/kg
Clean DF: 1
File Name: TS31030

CASNO	Target Analyte	Dilution Factor	Result	Reporting Limit	Result Qualifier	EPA Qualifier
7429-90-5	ALUMINUM	1	16000	28		
7440-36-0	ANTIMONY	1	7.2	2.8		
7440-38-2	ARSENIC	1	87	1.4		
7440-39-3	BARIUM	1	86	14		
7440-41-7	BERYLLIUM	1	1.4	0.69		
7440-43-9	CADMIUM	10	6.9	6.9	U	
7440-70-2	CALCIUM	1	19000	140		
7440-47-3	CHROMIUM	1	34	1.4		
7440-48-4	COBALT	1	2.6	1.4		
7440-50-8	COPPER	1	980	1.4		
7439-89-6	IRON	10	150000	140		
7439-92-1	LEAD	10	9600	4.1		
7439-95-4	MAGNESIUM	1	21000	140		
7439-96-5	MANGANESE	10	1500	14		
7440-02-0	NICKEL	1	6	2.8		
7440-09-7	POTASSIUM	1	5200	140		
7782-49-2	SELENIUM	10	6.9	6.9	U	
7440-22-4	SILVER	1	25	1.4		
7440-23-5	SODIUM	1	140	140	U	
7440-28-0	THALLIUM	10	14	14	U	
7440-62-2	VANADIUM	1	50	1.4		
7440-66-6	ZINC	1	1000	2.8		

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12/1/03

Data Package ID: IT0310176-1

Total ICP Metals

Method SW6010

Sample Results

Lab Name: Paragon Analytics, Inc.

Work Order Number: 0310176

Client Name: URS Operating Services, Inc.

ClientProject ID: Rico Argentine

Field ID: RA-SO-04
Lab ID: 0310176-3

Sample Matrix: SOIL
% Moisture: 35.3
Date Collected: 21-Oct-03
Date Extracted: 30-Oct-03
Date Analyzed: 30-Oct-03

Prep Batch: IP031030-1
QCBatchID: IP031030-1-2
Run ID: IT031030-1A1
Cleanup: NONE
Basis: Dry Weight

Sample Allquot: 1g
Final Volume: 100ml
Result Units: mg/kg
Clean DF: 1
File Name: TS31030

CASNO	Target Analyte	Dilution Factor	Result	Reporting Limit	Result Qualifier	EPA Qualifier
7429-90-5	ALUMINUM	1	860	31		
7440-36-0	ANTIMONY	1	10	3.1		
7440-38-2	ARSENIC	1	100	1.5		
7440-39-3	BARIUM	1	45	15		
7440-41-7	BERYLLIUM	1	0.77	0.77	U	
7440-43-9	CADMIUM	20	15	15	U	
7440-70-2	CALCIUM	1	1300	150		
7440-47-3	CHROMIUM	1	1.5	1.5	U	
7440-48-4	COBALT	1	1.5	1.5	U	
7440-50-8	COPPER	1	410	1.5		
7439-89-6	IRON	20	330000	310		
7439-92-1	LEAD	20	4100	9.3		
7439-95-4	MAGNESIUM	1	360	150		
7439-96-5	MANGANESE	1	69	1.5		
7440-02-0	NICKEL	1	3.1	3.1	U	
7440-09-7	POTASSIUM	20	42000	3100		
7782-49-2	SELENIUM	20	15	15	U	
7440-22-4	SILVER	1	11	1.5		
7440-23-5	SODIUM	1	1300	150		
7440-28-0	THALLIUM	20	31	31	U	
7440-62-2	VANADIUM	1	36	1.5		
7440-66-6	ZINC	1	290	3.1		

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Data Package ID: IT0310176-1

Total ICP Metals

Method SW6010

Sample Results

Lab Name: Paragon Analytics, Inc.

Work Order Number: 0310176

Client Name: URS Operating Services, Inc.

Client/Project ID: Rico Argentine

Field ID: RA-SO-05
Lab ID: 0310176-4

Sample Matrix: SOIL
% Moisture: 11.9
Date Collected: 21-Oct-03
Date Extracted: 30-Oct-03
Date Analyzed: 30-Oct-03

Prep Batch: IP031030-1
QCBatchID: IP031030-1-2
Run ID: IT031030-1A1
Cleanup: NONE
Basis: Dry Weight

Sample Aliquot: 1g
Final Volume: 100 ml
Result Units: mg/kg
Clean DF: 1
File Name: TS31030

CASNO	Target Analyte	Dilution Factor	Result	Reporting Limit	Result Qualifier	EPA Qualifier
7429-90-5	ALUMINUM	1	4700	23		
7440-36-0	ANTIMONY	1	4.6	2.3		
7440-38-2	ARSENIC	1	270	1.1		
7440-39-3	BARIUM	1	110	11		
7440-41-7	BERYLLIUM	1	0.57	0.57	U	
7440-43-9	CADMIUM	10	5.7	5.7	U	
7440-70-2	CALCIUM	1	6700	110		
7440-47-3	CHROMIUM	1	6	1.1		
7440-48-4	COBALT	1	5.5	1.1		
7440-50-8	COPPER	1	85	1.1		
7439-89-6	IRON	10	110000	110		
7439-92-1	LEAD	10	4700	3.4		
7439-95-4	MAGNESIUM	1	2600	110		
7439-96-5	MANGANESE	1	160	1.1		
7440-02-0	NICKEL	1	5.7	2.3		
7440-09-7	POTASSIUM	1	3400	110		
7782-49-2	SELENIUM	10	11	5.7		
7440-22-4	SILVER	1	15	1.1		
7440-23-5	SODIUM	1	110	110	U	
7440-28-0	THALLIUM	10	11	11	U	
7440-62-2	VANADIUM	1	13	1.1		
7440-66-6	ZINC	1	790	2.3		

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12/1/03

Data Package ID: IT0310176-1

Total ICP Metals

Method SW6010

Sample Results

Lab Name: Paragon Analytics, Inc.

Work Order Number: 0310176

Client Name: URS Operating Services, Inc.

ClientProject ID: Rico Argentine

Field ID: RA-SO-06
Lab ID: 0310176-5

Sample Matrix: SOIL
% Moisture: 6.7
Date Collected: 21-Oct-03
Date Extracted: 30-Oct-03
Date Analyzed: 30-Oct-03

Prep Batch: IP031030-1
QCBatchID: IP031030-1-2
Run ID: IT031030-1A1
Cleanup: NONE
Basis: Dry Weight

Sample Allquot: 1 g
Final Volume: 100 ml
Result Units: mg/kg
Clean DF: 1
File Name: TS31030

CASNO	Target Analyte	Dilution Factor	Result	Reporting Limit	Result Qualifier	EPA Qualifier
7429-90-5	ALUMINUM	1	9900	21		
7440-36-0	ANTIMONY	1	2.1	2.1	U	
7440-38-2	ARSENIC	1	36	1.1		
7440-39-3	BARIUM	1	57	11		
7440-41-7	BERYLLIUM	1	0.54	0.54	U	
7440-43-9	CADMIUM	3	1.6	1.6	U	
7440-70-2	CALCIUM	1	2200	110		
7440-47-3	CHROMIUM	1	6	1.1		
7440-48-4	COBALT	1	7.1	1.1		
7440-50-8	COPPER	1	110	1.1		
7439-89-6	IRON	3	46000	32		
7439-92-1	LEAD	3	1200	0.96		
7439-95-4	MAGNESIUM	1	8100	110		
7439-96-5	MANGANESE	3	1600	3.2		
7440-02-0	NICKEL	1	4.5	2.1		
7440-09-7	POTASSIUM	1	1000	110		
7782-49-2	SELENIUM	3	1.9	1.6		
7440-22-4	SILVER	1	5.8	1.1		
7440-23-5	SODIUM	1	110	110	U	
7440-28-0	THALLIUM	3	3.2	3.2	U	
7440-62-2	VANADIUM	1	30	1.1		
7440-66-6	ZINC	1	400	2.1		

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12/1/03

Data Package ID: IT0310176-1

Date Printed: Thursday, November 06, 2003

Paragon Analytics Inc.

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Total ICP Metals

Method SW6010

Sample Results

Lab Name: Paragon Analytics, Inc.

Work Order Number: 0310176

Client Name: URS Operating Services, Inc.

Client/Project ID: Rico Argentine

Field ID: RA-SO-07
Lab ID: 0310176-6

Sample Matrix: SOIL
% Moisture: 3.4
Date Collected: 21-Oct-03
Date Extracted: 30-Oct-03
Date Analyzed: 30-Oct-03

Prep Batch: IP031030-1
QCBatchID: IP031030-1-2
Run ID: IT031030-1A1
Cleanup: NONE
Basis: Dry Weight

Sample Aliquot: 1g
Final Volume: 100 ml
Result Units: mg/kg
Clean DF: 1
File Name: TS31030

CASNO	Target Analyte	Dilution Factor	Result	Reporting Limit	Result Qualifier	EPA Qualifier
7429-90-5	ALUMINUM	1	11000	21		
7440-36-0	ANTIMONY	1	2.1	2.1	U	
7440-38-2	ARSENIC	1	16	1		
7440-39-3	BARIUM	1	88	10		
7440-41-7	BERYLLIUM	1	1.1	0.52		
7440-43-9	CADMIUM	2	4.6	1		
7440-70-2	CALCIUM	1	3700	100		
7440-47-3	CHROMIUM	1	17	1		
7440-48-4	COBALT	1	11	1		
7440-50-8	COPPER	1	76	1		
7439-89-6	IRON	2	34000	21		
7439-92-1	LEAD	2	410	0.62		
7439-95-4	MAGNESIUM	1	8700	100		
7439-96-5	MANGANESE	2	1400	2.1		
7440-02-0	NICKEL	1	18	2.1		
7440-09-7	POTASSIUM	1	1600	100		
7782-49-2	SELENIUM	2	1.3	1		
7440-22-4	SILVER	1	1.9	1		
7440-23-5	SODIUM	1	100	100	U	
7440-28-0	THALLIUM	2	2.1	2.1	U	
7440-62-2	VANADIUM	1	19	1		
7440-66-6	ZINC	1	670	2.1		

Data Package ID: IT0310176-1

AM
12/11/03

Total ICP Metals

Method SW6010

Sample Results

Lab Name: Paragon Analytics, Inc.

Work Order Number: 0310176

Client Name: URS Operating Services, Inc.

Client Project ID: Rico Argentine

Field ID: RA-SO-09
Lab ID: 0310176-7

Sample Matrix: SOIL
% Moisture: 13.2
Date Collected: 22-Oct-03
Date Extracted: 30-Oct-03
Date Analyzed: 30-Oct-03

Prep Batch: IP031030-1
QCBatchID: IP031030-1-2
Run ID: IT031030-1A1
Cleanup: NONE
Basis: Dry Weight

Sample Allquot: 1g
Final Volume: 100ml
Result Units: mg/kg
Clean DF: 1
File Name: TS31030

CASNO	Target Analyte	Dilution Factor	Result	Reporting Limit	Result Qualifier	EPA Qualifier
7429-90-5	ALUMINUM	1	4700	23		
7440-36-0	ANTIMONY	1	12	2.3		
7440-38-2	ARSENIC	1	27	1.2		
7440-39-3	BARIUM	1	26	12		
7440-41-7	BERYLLIUM	1	0.82	0.58		
7440-43-9	CADMIUM	20	13	12		
7440-70-2	CALCIUM	1	2400	120		
7440-47-3	CHROMIUM	1	3.9	1.2		
7440-48-4	COBALT	1	16	1.2		
7440-50-8	COPPER	1	540	1.2		
7439-89-6	IRON	20	430000	230		
7439-92-1	LEAD	20	1700	6.9		
7439-95-4	MAGNESIUM	1	2200	120		
7439-96-5	MANGANESE	1	460	1.2		
7440-02-0	NICKEL	1	23	2.3		
7440-09-7	POTASSIUM	1	1300	120		
7782-49-2	SELENIUM	20	13	12		
7440-22-4	SILVER	1	11	1.2		
7440-23-5	SODIUM	1	120	120	U	
7440-28-0	THALLIUM	20	23	23	U	
7440-62-2	VANADIUM	1	18	1.2		
7440-66-6	ZINC	20	2100	46		

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Total ICP Metals

Method SW6010

Sample Results

Lab Name: Paragon Analytics, Inc.

Work Order Number: 0310176

Client Name: URS Operating Services, Inc.

ClientProject ID: Rico Argentine

Field ID:	IRA-SO-BO-1S1
Lab ID:	0310176-8

Sample Matrix: SOIL

% Moisture: 11.3

Date Collected: 21-Oct-03

Date Extracted: 30-Oct-03

Date Analyzed: 30-Oct-03

Prep Batch: IP031030-1

QCBatchID: IP031030-1-2

Run ID: IT031030-1A1

Cleanup: NONE

Basis: Dry Weight

Sample Aliquot: 1g

Final Volume: 100 ml

Result Units: mg/kg

Clean DF: 1

File Name: TS31030

CASNO	Target Analyte	Dilution Factor	Result	Reporting Limit	Result Qualifier	EPA Qualifier
7429-90-5	ALUMINUM	1	6900	23		
7440-36-0	ANTIMONY	1	2.3	2.3	U	
7440-38-2	ARSENIC	1	6.8	1.1		
7440-39-3	BARIUM	1	140	11		
7440-41-7	BERYLLIUM	1	0.68	0.56		
7440-43-9	CADMIUM	1	2.7	0.56		
7440-70-2	CALCIUM	1	4600	110		
7440-47-3	CHROMIUM	1	9.4	1.1		
7440-48-4	COBALT	1	5.6	1.1		
7440-50-8	COPPER	1	37	1.1		
7439-89-6	IRON	1	15000	11		
7439-92-1	LEAD	1	440	0.34		
7439-95-4	MAGNESIUM	1	3300	110		
7439-96-5	MANGANESE	1	760	1.1		
7440-02-0	NICKEL	1	8.9	2.3		
7440-09-7	POTASSIUM	1	1600	110		
7782-49-2	SELENIUM	1	0.87	0.56		
7440-22-4	SILVER	1	3.4	1.1		
7440-23-5	SODIUM	1	110	110	U	
7440-28-0	THALLIUM	1	1.1	1.1	U	
7440-62-2	VANADIUM	1	16	1.1		
7440-66-6	ZINC	1	410	2.3		

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Data Package ID: IT0310176-1

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Total ICP Metals

Method SW6010

Sample Results

Lab Name: Paragon Analytics, Inc.

Work Order Number: 0310176

Client Name: URS Operating Services, Inc.

ClientProject ID: Rico Argentine

Field ID: RA-SO-HE-1D1
Lab ID: 0310176-9

Sample Matrix: SOIL
% Moisture: 10.2
Date Collected: 20-Oct-03
Date Extracted: 30-Oct-03
Date Analyzed: 30-Oct-03

Prep Batch: IP031030-1
QCBatchID: IP031030-1-2
Run ID: IT031030-1A1
Cleanup: NONE
Basis: Dry Weight

Sample Aliquot: 1 g
Final Volume: 100 ml
Result Units: mg/kg
Clean DF: 1
File Name: TS31030

CASNO	Target Analyte	Dilution Factor	Result	Reporting Limit	Result Qualifier	EPA Qualifier
7429-90-5	ALUMINUM	1	9700	22		
7440-36-0	ANTIMONY	1	6.4	2.2		
7440-38-2	ARSENIC	1	29	1.1		
7440-39-3	BARIUM	1	130	11		
7440-41-7	BERYLLIUM	1	1.2	0.56		
7440-43-9	CADMIUM	10	75	5.6		
7440-70-2	CALCIUM	1	20000	110		
7440-47-3	CHROMIUM	1	16	1.1		
7440-48-4	COBALT	1	10	1.1		
7440-50-8	COPPER	1	270	1.1		
7439-89-6	IRON	10	34000	110		
7439-92-1	LEAD	10	7400	3.3		
7439-95-4	MAGNESIUM	1	10000	110		
7439-96-5	MANGANESE	10	3800	11		
7440-02-0	NICKEL	1	19	2.2		
7440-09-7	POTASSIUM	1	1800	110		
7782-49-2	SELENIUM	10	8.2	5.6		
7440-22-4	SILVER	1	58	1.1		
7440-23-5	SODIUM	1	110	110	U	
7440-28-0	THALLIUM	10	11	11	U	
7440-62-2	VANADIUM	1	19	1.1		
7440-66-6	ZINC	20	12000	45		

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Data Package ID: IT0310176-1

Total ICP Metals

Method SW6010

Sample Results

Lab Name: Paragon Analytics, Inc.

Work Order Number: 0310176

Client Name: URS Operating Services, Inc.

Client Project ID: Rico Argentine

Field ID: RA-SO-HE-1S2
Lab ID: 0310176-10

Sample Matrix: SOIL
% Moisture: 9.5
Date Collected: 20-Oct-03
Date Extracted: 30-Oct-03
Date Analyzed: 30-Oct-03

Prep Batch: IP031030-1
QCBatchID: IP031030-1-2
Run ID: IT031030-1A1
Cleanup: NONE
Basis: Dry Weight

Sample Aliquot: 1g
Final Volume: 100 ml
Result Units: mg/kg
Clean DF: 1
File Name: TS31030

CASNO	Target Analyte	Dilution Factor	Result	Reporting Limit	Result Qualifier	EPA Qualifier
7429-90-5	ALUMINUM	1	9200	22		
7440-36-0	ANTIMONY	1	20	2.2		
7440-38-2	ARSENIC	1	24	1.1		
7440-39-3	BARIUM	1	170	11		
7440-41-7	BERYLLIUM	1	0.83	0.55		
7440-43-9	CADMIUM	10	60	5.5		
7440-70-2	CALCIUM	1	10000	110		
7440-47-3	CHROMIUM	1	14	1.1		
7440-48-4	COBALT	1	9.4	1.1		
7440-50-8	COPPER	1	380	1.1		
7439-89-6	IRON	10	37000	110		
7439-92-1	LEAD	100	41000	33		
7439-95-4	MAGNESIUM	1	7900	110		
7439-96-5	MANGANESE	10	3000	11		
7440-02-0	NICKEL	1	14	2.2		
7440-09-7	POTASSIUM	1	1700	110		
7782-49-2	SELENIUM	10	27	5.5		
7440-22-4	SILVER	1	83	1.1		
7440-23-5	SODIUM	1	110	110	U	
7440-28-0	THALLIUM	10	11	11	U	
7440-62-2	VANADIUM	1	21	1.1		
7440-66-6	ZINC	100	12000	220		

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Data Package ID: IT0310176-1

Total ICP Metals

Method SW6010

Sample Results

Lab Name: Paragon Analytics, Inc.

Work Order Number: 0310176

Client Name: URS Operating Services, Inc.

Client Project ID: Rico Argentine

Field ID:	RA-SO-IR-1D1
Lab ID:	0310176-11

Sample Matrix: SOIL
% Moisture: 18.6
Date Collected: 21-Oct-03
Date Extracted: 30-Oct-03
Date Analyzed: 30-Oct-03

Prep Batch: IP031030-1
QCBatchID: IP031030-1-2
Run ID: IT031030-1A1
Cleanup: NONE
Basis: Dry Weight

Sample Aliquot: 1g
Final Volume: 100 ml
Result Units: mg/kg
Clean DF: 1
File Name: TS31030

CASNO	Target Analyte	Dilution Factor	Result	Reporting Limit	Result Qualifier	EPA Qualifier
7429-90-5	ALUMINUM	1	8200	25		
7440-36-0	ANTIMONY	1	2.5	2.5	U	
7440-38-2	ARSENIC	1	11	1.2		
7440-39-3	BARIUM	1	110	12		
7440-41-7	BERYLLIUM	1	0.61	0.61	U	
7440-43-9	CADMIUM	2	3.7	1.2		
7440-70-2	CALCIUM	1	3100	120		
7440-47-3	CHROMIUM	1	12	1.2		
7440-48-4	COBALT	1	8.3	1.2		
7440-50-8	COPPER	1	73	1.2		
7439-89-6	IRON	2	25000	25		
7439-92-1	LEAD	2	450	0.74		
7439-95-4	MAGNESIUM	1	3500	120		
7439-96-5	MANGANESE	1	930	1.2		
7440-02-0	NICKEL	1	11	2.5		
7440-09-7	POTASSIUM	1	1900	120		
7782-49-2	SELENIUM	2	1.9	1.2		
7440-22-4	SILVER	1	2.4	1.2		
7440-23-5	SODIUM	1	120	120	U	
7440-28-0	THALLIUM	2	2.5	2.5	U	
7440-62-2	VANADIUM	1	20	1.2		
7440-66-6	ZINC	1	500	2.5		

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Total ICP Metals

Method SW6010

Sample Results

Lab Name: Paragon Analytics, Inc.

Work Order Number: 0310176

Client Name: URS Operating Services, Inc.

Client/Project ID: Rico Argentine

Field ID: RA-SV-FO-2S2
Lab ID: 0310176-12

Sample Matrix: SOIL
% Moisture: 26.9
Date Collected: 20-Oct-03
Date Extracted: 30-Oct-03
Date Analyzed: 30-Oct-03

Prep Batch: IP031030-1
QCBatchID: IP031030-1-2
Run ID: IT031030-1A1
Cleanup: NONE
Basis: Dry Weight

Sample Aliquot: 1g
Final Volume: 100 ml
Result Units: mg/kg
Clean DF: 1
File Name: TS31030

CASNO	Target Analyte	Dilution Factor	Result	Reporting Limit	Result Qualifier	EPA Qualifier
7429-90-5	ALUMINUM	1	9300	27		
7440-36-0	ANTIMONY	1	4	2.7		
7440-38-2	ARSENIC	1	19	1.4		
7440-39-3	BARIUM	1	230	14		
7440-41-7	BERYLLIUM	1	0.77	0.68		
7440-43-9	CADMIUM	3	12	2.1		
7440-70-2	CALCIUM	1	12000	140		
7440-47-3	CHROMIUM	1	14	1.4		
7440-48-4	COBALT	1	6.9	1.4		
7440-50-8	COPPER	1	160	1.4		
7439-89-6	IRON	3	42000	41		
7439-92-1	LEAD	3	1300	1.2		
7439-95-4	MAGNESIUM	1	5100	140		
7439-96-5	MANGANESE	3	2600	4.1		
7440-02-0	NICKEL	1	12	2.7		
7440-09-7	POTASSIUM	1	2200	140		
7782-49-2	SELENIUM	3	3.2	2.1		
7440-22-4	SILVER	1	8	1.4		
7440-23-5	SODIUM	1	190	140		
7440-28-0	THALLIUM	3	4.1	4.1	U	
7440-62-2	VANADIUM	1	22	1.4		
7440-66-6	ZINC	3	2700	8.2		

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Data Package ID: IT0310176-1

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Total MERCURY

Method SW7471

Sample Results

Lab Name: Paragon Analytics, Inc.
Client Name: URS Operating Services, Inc.
Client Project ID: Rico Argentine
Work Order Number: 0310176
Reporting Basis: Dry Weight

Final Volume: 100 ml
Matrix: SOIL
Result Units: mg/kg

Client Sample ID	Lab ID	Date Collected	Date Prepared	Date Analyzed	Percent Moisture	Dilution Factor	Result	Reporting Limit	Flag	Sample Allquot
RA-SO-02	0310176-1	10/21/2003	10/29/2003	10/30/2003	9.5	1	0.11	0.11	U	0.6 g
RA-SO-03	0310176-2	10/21/2003	10/29/2003	10/30/2003	27.4	1	0.28	0.14		0.6 g
RA-SO-04	0310176-3	10/21/2003	10/29/2003	10/30/2003	35.3	1	0.15	0.15	U	0.6 g
RA-SO-05	0310176-4	10/21/2003	10/29/2003	10/30/2003	11.9	1	0.11	0.11	U	0.6 g
RA-SO-06	0310176-5	10/21/2003	10/29/2003	10/30/2003	6.7	1	0.11	0.11	U	0.6 g
RA-SO-07	0310176-6	10/21/2003	10/29/2003	10/30/2003	3.4	1	0.1	0.1	U	0.6 g
RA-SO-09	0310176-7	10/22/2003	10/29/2003	10/30/2003	13.2	1	0.12	0.12	U	0.6 g
RA-SO-BO-1S1	0310176-8	10/21/2003	10/29/2003	10/30/2003	11.3	1	0.15	0.11		0.6 g
RA-SO-HE-1D1	0310176-9	10/20/2003	10/29/2003	10/30/2003	10.2	1	0.21	0.11		0.6 g
RA-SO-HE-1S2	0310176-10	10/20/2003	10/29/2003	10/30/2003	9.5	1	0.17	0.11		0.6 g
RA-SO-IR-1D1	0310176-11	10/21/2003	10/29/2003	10/30/2003	18.6	1	0.16	0.12		0.6 g
RA-SV-FO-2S2	0310176-12	10/20/2003	10/29/2003	10/30/2003	26.9	1	0.76	0.14		0.6 g

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Comments:

1. ND or U = Not Detected at or above the client requested detection limit.

Data Package ID: HG0310176-1

Date Printed: Thursday, November 06, 2003

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**REGION VIII
DATA VALIDATION REPORT
INORGANIC**

TDD No.	Site Name		Operable Unit
0308-0013	Rico Argentine		
RPM/OSC Name			
Luke Chavez			
Contractor Laboratory	Contract No.	SDG No.	Laboratory DPO/Region
Paragon Analytics, Inc.	NA	0310175	

Review Assigned Date November 13, 2003 Data Validator Mark McDaniel
 Review Completion Date November 19, 2003

Station Number	Laboratory ID	Matrix	Analysis
RL-GA-LA-1S4	0310175-1	Soil	Metals by SW-846 methods 6010B and 7471A. Total cyanide by SW-846 method 9014.
RA-HA-LI-1S2	0310175-2		
RA-HA-RB-01	0310175-3		
RA-HA-RB-02	0310175-4		
RA-HA-RB-03	0310175-5		
RA-HA-RB-04	0310175-6		
RA-SD-07	0310175-7	Sediment	
RA-SD-08	0310175-8		
RA-SD-09	0310175-9		
RA-SD-GR-1D1	0310175-10	Soil	
RA-SH-CO-1S1	0310175-11		
RA-SH-DA-1D1	0310175-12		
RA-SO-1	0310175-13		

UOS

URS Operating Services, Inc.

Data Validation Report

Station Number	Laboratory ID	Matrix	Analysis
RA-SO-10	0310175-14	Soil	Metals by SW-846 method 6010B and 7471A. Total cyanide by SW-846 method 9014.
RA-SO-11	0310175-15		
RA-SO-12	0310175-16		

DATA QUALITY STATEMENT

- () Data are ACCEPTABLE according to EPA Functional guidelines with no qualifiers (flags) added by the reviewer.
- () Data are UNACCEPTABLE according to EPA Functional Guidelines.
- (X) Data are acceptable with QUALIFICATIONS noted in review.

Telephone/Communication Logs Enclosed? Yes ____ No X

TPO Attention Required? Yes _____ No X If yes, list the items that require attention:

INORGANIC DATA QUALITY ASSURANCE REVIEW

REVIEW NARRATIVE SUMMARY

This data package was reviewed according to "USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Data Review," February 1994, modified for the methods used.

Raw data were reviewed for completeness and transcription accuracy onto the summary forms. Approximately 10-20% of the results reported in each of the samples, calibrations, and QC analyses were recalculated and verified. If problems were identified during the recalculation of results, a more thorough calculation check was performed.

SDG No. 0310175 consisted of 3 sediment samples and 13 soil samples for TAL metals by 6010B, and 7471A, as well as total cyanide by 9014.

The following table lists the data qualifiers added to the sample analyses. Please see Data Qualifier Definitions, attached to the end of this report.

Sample ID	Elements	Qualifiers	Reason for Qualification	Review Section
All Samples	As, Mn	J	MS/MSD RPD exceeds criteria.	IX
All Samples	Sb, Mg, Zn, As, Ba, Ca, Cu	J/UJ	Matrix spike % recovery exceeds criteria.	IX
All Samples	Ba, Ca, Cu, Mg, Zn	J	Sample duplicate %RPD exceeds criteria.	XI

Method/SOW Number 6010B, 7471A, 9014

Revision _____

Inorganic Deliverables Completeness Checklist

- P Inorganic Cover Page
- P Inorganic Analysis Data Sheets
- P Initial Calibration and Calibration Verification Results
- P Continuing Calibration Verification Results
- P CRDL Standard for ICP and AA
- P Blank Analysis Results
- P ICP Interference Check Sample Results
- P Spiked Sample Results
- P Post-digest Spiked Sample Analysis
- R Duplicate Sample Results
- NP Instrument Detection Limits
- P Laboratory Control Sample Results
- P Standard Addition Results
- P ICP Serial Dilution Results
- NA Holding Times Summary Sheet
- P ICP Interelement Correction Factors
- P ICP Linear Ranges
- P Raw Data
 - P Samples P Calibration Standards
 - P Duplicates P ICP QC (ICS and Serial Dilution)
 - NA Cr6 P Mercury Analysis
- P Percent Solids Calculations - Solids Only
- P Sample Prep/Digestion Logs (Form XIII)
- P Analysis Run Log (Form XIV)
- P Chain-of-Custody
- P Sample Description
- P Case Narrative
- P Method References

- P Blanks P Spikes
- P LCS
- P Cyanide Analysis

KEY:

- P = Provided in original data package, as required by the SOW
- R = Provided as Resubmission
- NP = Not provided in original data package or as resubmission
- NR = Not required under the SOW
- NA = Not applicable to this data package or analysis

I. DELIVERABLES

All deliverables were present as specified in the Statement of Work.

Yes ___ No X

Comments: The laboratory provided QA/QC summary reports, however, these summary reports are not considered CLP equivalent forms.

II. HOLDING TIMES AND PRESERVATION CRITERIA

All holding times and preservation criteria were met.

Yes ___ No X

Comments: Temperature of samples upon receipt was 16°C. The preservation requirements are 4°C(±2°C). No qualifications are necessary.

III. INSTRUMENT CALIBRATIONS: STANDARDS AND BLANKS

Initial instrument calibrations were performed according to requirements.

Yes X No ___

Comments: None.

The instruments were calibrated daily and each time an analysis run was performed.

Yes X No ___

Comments: None.

The instruments were calibrated using one blank and the appropriate number of standards.

Yes X No ___

Comments: None.

IV. FORM 1 - SAMPLE ANALYSIS RESULTS

Sample analyses were entered correctly on Form 1s.

Yes X No ___

Comments: None.

V. FORM 2A - INITIAL AND CONTINUING CALIBRATION VERIFICATION

The initial and continuing calibration verification standards (ICV and CCV, respectively) met requirements.

Yes X No ___

Comments: None.

The calibration verification results were within 90-110% recovery for metals, 80-120% for mercury, and 85-115% for cyanide.

Yes X No ___

Comments: None.

The continuing calibration standards were run at 10% frequency.

Yes X No ___

Comments: Continuing calibration blanks were run every 10 samples.

VI. FORM 2B - CRDL STANDARD FOR ICP AND AA

ICP Analysis: Standards (CRD) at two times the CRDL or the IDL (whichever were greater) were analyzed at the beginning and the end of each sample run.

Yes X No ___ NA ___

Comments: None.

GFAA Analysis: Standards (CRA) at two times CRDL were analyzed at the beginning of each sample run.

Yes___ No___ NA X

Comments: Samples were not analyzed by GFAA.

The CRI and/or the CRA were analyzed after the ICV.

Yes X No___

Comments: None.

VII. FORM 3 - BLANKS

The initial and continuing calibration blanks (ICB and CCB, respectively) met requirements.

Yes X No___

Comments: None.

The continuing calibration blanks were run at 10% frequency.

Yes X No___

Comments: Continuing calibration blanks were run every 10 samples.

A laboratory/preparation blank was run at the frequency of one per twenty samples, or per sample delivery group (whichever is more frequent), and for each matrix analyzed.

Yes X No___

Comments: None.

All analyzed blanks were free of contamination.

Yes X No___

Comments: None.

VIII. FORM 4 - ICP INTERFERENCE CHECK SAMPLE

The ICP interference check sample (ICS) was run twice per eight hour shift and/or at the beginning and end of each sample set analysis sequence (whichever is more frequent).

Yes X No ___ NA ___

Comments: None.

Percent recovery of the analytes in solution ICSAB were within the range of 80-120%.

Yes X No ___ NA ___

Comments: Potassium, and sodium were not included in the ICSAB analysis and were therefore not evaluated.

IX. FORM 5A - MATRIX SPIKE SAMPLE ANALYSIS

A matrix spike sample was analyzed with every twenty or fewer samples of a similar matrix, or one per sample delivery group (whichever is more frequent).

Yes ___ No X

Comments: A sample from another SDG was selected for the CN 9014 Analyses.

The percent recoveries (%R) were calculated correctly.

$$\% \text{ Recovery} = \frac{(SSR - SR)}{SA} \times 100$$

SSR = spiked sample result
 SR = sample result
 SA = spike added

Yes X No ___

Comments: None.

Spike recoveries were within the range of 75-125% (an exception is granted where the sample concentration is four times the spike concentration).

Yes No

Comments: The following tables detail % recoveries and RPDs that exceed acceptance criteria:

Element	Spike Recovery (%)	Matrix	Samples Affected	Qualifiers
Sb Mg Zn As Ba Ca Cu	MS=79, MSD=78 MS=129 MS=139, MSD=138% MSD=137 MSD=127 MSD=67 MSD=123	Soil	All	J/UJ

Element	MS/MSD RPD	Matrix	Samples Affected	Qualifiers
As Mn	59 22	Soil	All	J/UJ

X. FORM 5B - POST DIGEST SPIKE RECOVERY

A post-digest spike was performed for those elements that did not meet the specified criteria (i.e., Pre-digestion/pre-distillation spike recovery falls outside of control limits and sample result is less than four times the spike amount added.).

Yes No Not Required

Comments: None.

XI. FORM 6 - DUPLICATE SAMPLE ANALYSIS

Duplicate sample analysis was performed with every twenty or fewer samples of a similar matrix, or one per sample delivery group (whichever is more frequent).

Yes No

Comments: None.

The RPDs were calculated correctly.

$$RPD = \frac{(S - D)}{(S + D)/2} \times 100$$

S = sample
D = duplicate

Yes X No

Comments: None.

For sample concentrations greater than five times the CRDL, RPDs were within ±20% (limits of ±35% apply for soil/sediments/tailings samples).

Yes No X

Comments: The following table details those compounds in which the RPD between the sample (RA-SD-07) and it's duplicate exceeded criteria:

Element	sample/duplicate RPD	Matrix	Samples Affected	Qualifiers
Ba, Mg	37 48	Soil	All	J/UJ

For sample concentrations less than five times the CRDL, duplicate analysis results were within the control window of ± CRDL (two times CRDL for soils).

Yes X No

Comments: None.

XII. GFAA QC

Duplicate injections were performed on all GFAA samples and the RSD was within ± 20%.

Yes No NA X

Comments: GFAA analyses were not performed on these samples.

Analytical spikes were performed on all GFAA samples and the percent recovery was 85 - 115%.

Yes___ No___ NA X

Comments: None.

MSAs were analyzed when required and the correlation coefficient was > 0.995.

Yes___ No___ NA X

Comments: None.

XIII. FORM 7 - LABORATORY CONTROL SAMPLE

The laboratory control sample (LCS) was prepared and analyzed with every twenty or fewer samples of a similar matrix, or one per sample delivery group (whichever is more frequent).

Yes X No___

Comments: None.

All results were within control limits.

Yes X No___

Comments: None.

XIV. FORM 8 - STANDARD ADDITION RESULTS

Results from graphite furnace standard additions were entered on Form VIII as directed in the method.

Yes___ No___ NA X

Comments: None.

XV. FORM 9 - ICP QC

A serial dilution was performed for ICP analysis with every twenty or fewer samples of a similar matrix, or one per sample delivery group, whichever is more frequent.

Yes No NA

Comments: None.

The serial dilution was without interference problems.

Yes No NA

Comments: None.

XVI. FORM 10 - QUARTERLY INSTRUMENT DETECTION LIMITS (IDL)

IDLs were provided for all elements on the target analyte list.

Yes No

Comments: IDLs and MDLs were not provided.

Reported IDLs met requirements.

Yes No

Comments: Form 10 equivalent was not provided.

XVII. FORM 11 - INTERELEMENT CORRECTION FACTORS FOR ICP

Interelement corrections for ICP were reported.

Yes No NA

Comments: None.

XVIII. FORM 12 - ICP LINEAR RANGES

ICP linear ranges were reported.

Yes X No ___ NA ___

Comments: None.

XIX. LINEAR RANGE VERIFICATION ANALYSIS

Linear Range Verification Analysis (LRA) was performed and results were within control limits of $\pm 5\%$ of the true value.

Yes ___ No ___ NA X

Comments: None.

XX. FORM 13 - PREPARATION LOG

Information on the preparation of samples for analysis was reported on Form XIII.

Yes X No ___

Comments: None.

XXI. FORM 14 - ANALYSIS RUN LOG

A Form XIV with the required information was filled out for each analysis run in the data package.

Yes X No ___

Comments: None.

XXII. Additional Comments or Problems/Resolutions Not Addressed Above

Yes ___ No X

Comments: None.

DATA QUALIFIER DEFINITIONS

For the purpose of Data Validation, the following code letters and associated definitions are provided for use by the data validator to summarize the data quality. Use of additional qualifiers should be carefully considered. Definitions for all qualifiers used should be provided with each report.

GENERAL QUALIFIERS for use with both INORGANIC and ORGANIC DATA

- R** - Reported value is "rejected." Resampling or reanalysis may be necessary to verify the presence or absence of the compound.
- J** - The associated numerical value is an estimated quantity because the Quality Control criteria were not met.
- UJ** - The reported amount is estimated because Quality Control criteria were not met. Element or compound was not detected.
- NJ** - The analysis indicates the presence of an analyte that has been "tentatively identified" and the associated numerical value represents its approximate concentration.
- N** - The analysis indicates the presence of an analyte for which there is presumptive evidence to make a tentative identification.
- U** - The material was analyzed for, but was not-detected above the level of the associated value. The associated value is either the sample quantitation limit or the sample detection limit.

ACRONYMS

AA	Atomic Absorption
Ag	Silver
CCB	Continuing Calibration Blank
CCV	Continuing Calibration Verification
CFR	Code of Federal Regulations
CLP	Contract Laboratory Program
CRA	CRDL standard required for AA
CRDL	Contract Required Detection Limit
CRI	CRDL standard required for ICP
CV	Cold Vapor
EPA	U.S. Environmental Protection Agency
GFAA	Graphite Furnace Atomic Absorption
Hg	Mercury
ICB	Initial Calibration Blank
ICP	Inductively Coupled Plasma
ICS	Interference Check Sample
ICSA	Interference Check Sample (Solution A)
ICSAB	Interference Check Sample (Solution AB)
ICV	Initial Calibration Verification
IDL	Instrument Detection Limit
LCS	Laboratory Control Sample
LRA	Linear Range Verification Analysis
MSA	Method of Standard Additions
PDS	Post Digestion Spike
QC	Quality Control
RPD	Relative Percent Difference
RPM	Regional Project Manager
RSD	Percent Relative Standard Deviation
SA	Spike Added
SAS	Special Analytical Services
SDG	Sample Delivery Group
SOW	Statement of Work
SR	Sample Result
SSR	Spiked Sample Result
TPO	Technical Project Officer

Total ICP Metals

Method SW6010

Sample Results

Lab Name: Paragon Analytics, Inc.

Work Order Number: 0310175

Client Name: URS Operating Services, Inc.

ClientProject ID: Rico Argentine

Field ID: RA-GL-LA-1S4
Lab ID: 0310175-1

Sample Matrix: SOIL
% Moisture: 12.7
Date Collected: 21-Oct-03
Date Extracted: 31-Oct-03
Date Analyzed: 31-Oct-03

Prep Batch: IP031031-2
QCBatchID: IP031031-2-1
Run ID: IT031031-1A1
Cleanup: NONE
Basis: Dry Weight

Sample Allquot: 1g
Final Volume: 100 ml
Result Units: mg/kg
Clean DF: 1
File Name: TS31031

CASNO	Target Analyte	Dilution Factor	Result	Reporting Limit	Result Qualifier	EPA Qualifier
7429-90-5	ALUMINUM	1	11000	23		
7440-36-0	ANTIMONY	1	2.4	2.3		J
7440-38-2	ARSENIC	1	13	1.1		J
7440-39-3	BARIUM	1	150	11		J
7440-41-7	BERYLLIUM	1	0.86	0.57		
7440-43-9	CADMIUM	2	6.1	1.1		
7440-70-2	CALCIUM	1	5600	110		J
7440-47-3	CHROMIUM	1	16	1.1		
7440-48-4	COBALT	1	8.3	1.1		
7440-50-8	COPPER	1	73	1.1		J
7439-89-6	IRON	2	23000	23		
7439-92-1	LEAD	2	510	0.69		
7439-95-4	MAGNESIUM	1	5700	110		J
7439-96-5	MANGANESE	2	1200	2.3		J
7440-02-0	NICKEL	1	13	2.3		
7440-09-7	POTASSIUM	1	2400	110		
7782-49-2	SELENIUM	2	1.8	1.1		
7440-22-4	SILVER	1	3	1.1		
7440-23-5	SODIUM	1	110	110	U	
7440-28-0	THALLIUM	2	2.3	2.3	U	
7440-62-2	VANADIUM	1	27	1.1		
7440-66-6	ZINC	1	960	2.3		J

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Data Package ID: IT0310175-1

Total ICP Metals

Method SW6010

Sample Results

Lab Name: Paragon Analytics, Inc.

Work Order Number: 0310175

Client Name: URS Operating Services, Inc.

ClientProject ID: Rico Argentine

Field ID: RA-HA-LI-1S2
Lab ID: 0310175-2

Sample Matrix: SOIL
% Moisture: 8.6
Date Collected: 16-Oct-03
Date Extracted: 31-Oct-03
Date Analyzed: 31-Oct-03

Prep Batch: IP031031-2
QC Batch ID: IP031031-2-1
Run ID: IT031031-1A1
Cleanup: NONE
Basis: Dry Weight

Sample Aliquot: 1 g
Final Volume: 100 ml
Result Units: mg/kg
Clean DF: 1
File Name: TS31031

CASNO	Target Analyte	Dilution Factor	Result	Reporting Limit	Result Qualifier	EPA Qualifier
7429-90-5	ALUMINUM	1	9400	22		
7440-36-0	ANTIMONY	1	2.2	2.2	U	J
7440-38-2	ARSENIC	1	16	1.1		J
7440-39-3	BARIUM	1	130	11		J
7440-41-7	BERYLLIUM	1	0.82	0.55		
7440-43-9	CADMIUM	2	6.3	1.1		
7440-70-2	CALCIUM	1	4200	110		J
7440-47-3	CHROMIUM	1	13	1.1		
7440-48-4	COBALT	1	7.8	1.1		
7440-50-8	COPPER	1	87	1.1		J
7439-89-6	IRON	2	25000	22		
7439-92-1	LEAD	2	580	0.66		J
7439-95-4	MAGNESIUM	1	5700	110		J
7439-96-5	MANGANESE	1	890	1.1		
7440-02-0	NICKEL	1	12	2.2		
7440-09-7	POTASSIUM	1	1700	110		
7782-49-2	SELENIUM	2	1.1	1.1	U	
7440-22-4	SILVER	1	2.2	1.1		
7440-23-5	SODIUM	1	110	110	U	
7440-28-0	THALLIUM	2	2.2	2.2	U	
7440-62-2	VANADIUM	1	24	1.1		
7440-66-6	ZINC	1	970	2.2		J

Handwritten notes:
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Data Package ID: IT0310175-1

Total ICP Metals

Method SW6010

Sample Results

Lab Name: Paragon Analytics, Inc.

Work Order Number: 0310175

Client Name: URS Operating Services, Inc.

Client/Project ID: Rico Argentine

Field ID: RA-HA-RB-01
Lab ID: 0310175-3

Sample Matrix: SOIL
% Moisture: 9.3
Date Collected: 20-Oct-03
Date Extracted: 31-Oct-03
Date Analyzed: 31-Oct-03

Prep Batch: IP031031-2
QCBatchID: IP031031-2-1
Run ID: IT031031-1A1
Cleanup: NONE
Basis: Dry Weight

Sample Aliquot: 1g
Final Volume: 100 ml
Result Units: mg/kg
Clean DF: 1
File Name: TS31031

CASNO	Target Analyte	Dilution Factor	Result	Reporting Limit	Result Qualifier	EPA Qualifier
7429-90-5	ALUMINUM	1	18000	22		
7440-36-0	ANTIMONY	1	2.7	2.2		J
7440-38-2	ARSENIC	1	32	1.1		J
7440-39-3	BARIUM	1	28	11		J
7440-41-7	BERYLLIUM	1	1.8	0.55		
7440-43-9	CADMIUM	10	82	5.5		
7440-70-2	CALCIUM	10	100000	1100		J
7440-47-3	CHROMIUM	1	35	1.1		
7440-48-4	COBALT	1	15	1.1		
7440-50-8	COPPER	1	480	1.1		J
7439-89-6	IRON	10	70000	110		
7439-92-1	LEAD	10	7800	3.3		
7439-95-4	MAGNESIUM	1	35000	110		J
7439-96-5	MANGANESE	10	6600	11		J
7440-02-0	NICKEL	1	20	2.2		
7440-09-7	POTASSIUM	1	1800	110		
7782-49-2	SELENIUM	10	7.5	5.5		
7440-22-4	SILVER	1	38	1.1		
7440-23-5	SODIUM	1	110	110	U	
7440-28-0	THALLIUM	10	11	11	U	
7440-62-2	VANADIUM	1	29	1.1		
7440-66-6	ZINC	50	15000	110		J

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Data Package ID: IT0310175-1

Total ICP Metals

Method SW6010

Sample Results

Lab Name: Paragon Analytics, Inc.

Work Order Number: 0310175

Client Name: URS Operating Services, Inc.

ClientProject ID: Rico Argentine

Field ID: RA-HA-RB-02
Lab ID: 0310175-4

Sample Matrix: SOIL
% Moisture: 12.3
Date Collected: 20-Oct-03
Date Extracted: 31-Oct-03
Date Analyzed: 31-Oct-03

Prep Batch: IP031031-2
QCBatchID: IP031031-2-1
Run ID: IT031031-1A1
Cleanup: NONE
Basis: Dry Weight

Sample Allquot: 1g
Final Volume: 100 ml
Result Units: mg/kg
Clean DF: 1
File Name: TS31031

CASNO	Target Analyte	Dilution Factor	Result	Reporting Limit	Result Qualifier	EPA Qualifier
7429-90-5	ALUMINUM	1	13000	23		
7440-36-0	ANTIMONY	1	3.9	2.3		J
7440-38-2	ARSENIC	1	23	1.1		J
7440-39-3	BARIUM	1	110	11		J
7440-41-7	BERYLLIUM	1	0.67	0.57		
7440-43-9	CADMIUM	5	34	2.9		
7440-70-2	CALCIUM	1	49000	110		J
7440-47-3	CHROMIUM	1	35	1.1		
7440-48-4	COBALT	1	7.6	1.1		
7440-50-8	COPPER	1	300	1.1		J
7439-89-6	IRON	5	66000	57		
7439-92-1	LEAD	5	2200	1.7		
7439-95-4	MAGNESIUM	1	10000	110		J
7439-96-5	MANGANESE	1	280	1.1		J
7440-02-0	NICKEL	1	19	2.3		
7440-09-7	POTASSIUM	1	2600	110		
7782-49-2	SELENIUM	5	2.9	2.9	U	
7440-22-4	SILVER	1	5.5	1.1		
7440-23-5	SODIUM	1	160	110		
7440-28-0	THALLIUM	5	5.7	5.7	U	
7440-62-2	VANADIUM	1	29	1.1		
7440-66-6	ZINC	5	1700	11		J

Data Package ID: IT0310175-1

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Total ICP Metals

Method SW6010

Sample Results

Lab Name: Paragon Analytics, Inc.

Work Order Number: 0310175

Client Name: URS Operating Services, Inc.

Client/Project ID: Rico Argentine

Field ID: RA-HA-RB-03
Lab ID: 0310175-5

Sample Matrix: SOIL
% Moisture: 12.1
Date Collected: 20-Oct-03
Date Extracted: 31-Oct-03
Date Analyzed: 31-Oct-03

Prep Batch: IP031031-2
QCBatchID: IP031031-2-1
Run ID: IT031031-1A1
Cleanup: NONE
Basis: Dry Weight

Sample Aliquot: 1g
Final Volume: 100ml
Result Units: mg/kg
Clean DF: 1
File Name: TS31031

CASNO	Target Analyte	Dilution Factor	Result	Reporting Limit	Result Qualifier	EPA Qualifier
7429-90-5	ALUMINIUM	1	1800	23		
7440-36-0	ANTIMONY	1	47	2.3		J
7440-38-2	ARSENIC	1	150	1.1		J
7440-39-3	BARIUM	1	35	11		J
7440-41-7	BERYLLIUM	1	0.57	0.57	U	
7440-43-9	CADMIUM	20	270	11		
7440-70-2	CALCIUM	1	9100	110		J
7440-47-3	CHROMIUM	1	4.8	1.1		
7440-48-4	COBALT	1	2.1	1.1		
7440-50-8	COPPER	20	4000	23		J
7439-89-6	IRON	20	150000	230		
7439-92-1	LEAD	200	91000	68		
7439-95-4	MAGNESIUM	1	700	110		J
7439-96-5	MANGANESE	1	310	1.1		J
7440-02-0	NICKEL	1	5.3	2.3		
7440-09-7	POTASSIUM	1	1700	110		
7782-49-2	SELENIUM	20	13	11		
7440-22-4	SILVER	20	210	23		
7440-23-5	SODIUM	1	310	110		
7440-28-0	THALLIUM	20	23	23	U	
7440-62-2	VANADIUM	1	17	1.1		
7440-66-6	ZINC	200	45000	460		J

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Data Package ID: IT0310175-1

Total ICP Metals

Method SW6010

Sample Results

Lab Name: Paragon Analytics, Inc.

Work Order Number: 0310175

Client Name: URS Operating Services, Inc.

ClientProject ID: Rico Argentina

Field ID: RA-HA-RB-04
Lab ID: 0310175-6

Sample Matrix: SOIL
% Moisture: 18.8
Date Collected: 20-Oct-03
Date Extracted: 31-Oct-03
Date Analyzed: 31-Oct-03

Prep Batch: IP031031-2
QCBatchID: IP031031-2-1
Run ID: IT031031-1A1
Cleanup: NONE
Basis: Dry Weight

Sample Aliquot: 1g
Final Volume: 100ml
Result Units: mg/kg
Clean DF: 1
File Name: TS31031

CASNO	Target Analyte	Dilution Factor	Result	Reporting Limit	Result Qualifier	EPA Qualifier
7429-90-5	ALUMINUM	1	6400	25		
7440-36-0	ANTIMONY	1	10	2.5		J
7440-38-2	ARSENIC	1	30	1.2		J
7440-39-3	BARIUM	1	340	12		J
7440-41-7	BERYLLIUM	1	0.99	0.62		
7440-43-9	CADMIUM	5	38	3.1		
7440-70-2	CALCIUM	1	8700	120		J
7440-47-3	CHROMIUM	1	8.4	1.2		
7440-48-4	COBALT	1	7.6	1.2		
7440-50-8	COPPER	1	410	1.2		J
7439-89-6	IRON	5	67000	62		
7439-92-1	LEAD	5	3700	1.8		
7439-95-4	MAGNESIUM	1	2000	120		J
7439-96-5	MANGANESE	5	3300	6.2		J
7440-02-0	NICKEL	1	9.4	2.5		
7440-09-7	POTASSIUM	1	1800	120		
7782-49-2	SELENIUM	5	3.5	3.1		
7440-22-4	SILVER	1	14	1.2		
7440-23-5	SODIUM	1	150	120		
7440-28-0	THALLIUM	5	6.2	6.2	U	
7440-62-2	VANADIUM	1	22	1.2		
7440-66-6	ZINC	50	7600	120		J

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Data Package ID: IT0310175-1

Total ICP Metals

Method SW6010

Sample Results

Lab Name: Paragon Analytics, Inc.

Work Order Number: 0310175

Client Name: URS Operating Services, Inc.

Client Project ID: Rico Argentine

Field ID: RA-SD-07
Lab ID: 0310175-7

Sample Matrix: SEDIMENT
% Moisture: 14.3
Date Collected: 21-Oct-03
Date Extracted: 31-Oct-03
Date Analyzed: 31-Oct-03

Prep Batch: IP031031-2
QCBatchID: IP031031-2-1
Run ID: IT031031-1A1
Cleanup: NONE
Basis: Dry Weight

Sample Allquot: 1g
Final Volume: 100 ml
Result Units: mg/kg
Clean DF: 1
File Name: TS31031

CASNO	Target Analyte	Dilution Factor	Result	Reporting Limit	Result Qualifier	EPA Qualifier
7429-90-5	ALUMINIUM	1	5400	23		
7440-36-0	ANTIMONY	1	2.3	2.3	URS	N
7440-38-2	ARSENIC	1	6.8	1.2	J	N
7440-39-3	BARIUM	1	94	12	J	*N
7440-41-7	BERYLLIUM	1	0.69	0.58		
7440-43-9	CADMIUM	2	1.2	1.2	U	
7440-70-2	CALCIUM	1	3900	120	J	*N
7440-47-3	CHROMIUM	1	11	1.2		
7440-48-4	COBALT	1	6	1.2		
7440-50-8	COPPER	1	9	1.2	J	*N
7439-89-6	IRON	2	17000	23		
7439-92-1	LEAD	2	13	0.7		
7439-95-4	MAGNESIUM	1	3800	120	J	N
7439-96-5	MANGANESE	2	430	2.3	J	.
7440-02-0	NICKEL	1	10	2.3		
7440-09-7	POTASSIUM	1	1200	120		
7782-49-2	SELENIUM	2	1.2	1.2	U	
7440-22-4	SILVER	1	1.2	1.2	U	
7440-23-5	SODIUM	1	120	120	U	
7440-28-0	THALLIUM	2	2.3	2.3	U	
7440-62-2	VANADIUM	1	16	1.2		
7440-66-6	ZINC	1	39	2.3	J	*N

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Data Package ID: IT0310175-1

Total ICP Metals

Method SW6010

Sample Results

Lab Name: Paragon Analytics, Inc.

Work Order Number: 0310175

Client Name: URS Operating Services, Inc.

ClientProject ID: Rico Argentine

Field ID: RA-SD-08
Lab ID: 0310175-8

Sample Matrix: SEDIMENT
% Moisture: 29.8
Date Collected: 21-Oct-03
Date Extracted: 31-Oct-03
Date Analyzed: 31-Oct-03

Prep Batch: IP031031-2
QCBatchID: IP031031-2-1
Run ID: IT031031-1A1
Cleanup: NONE
Basis: Dry Weight

Sample Aliquot: 1g
Final Volume: 100ml
Result Units: mg/kg
Clean DF: 1
File Name: TS31031

CASNO	Target Analyte	Dilution Factor	Result	Reporting Limit	Result Qualifier	EPA Qualifier
7429-90-5	ALUMINUM	1	10000	28		
7440-36-0	ANTIMONY	1	9.3	2.8	J	
7440-38-2	ARSENIC	1	48	1.4	J	
7440-39-3	BARIUM	1	96	14	J	
7440-41-7	BERYLLIUM	1	1.9	0.71		
7440-43-9	CADMIUM	10	12	7.1		
7440-70-2	CALCIUM	1	13000	140	J	
7440-47-3	CHROMIUM	1	20	1.4		
7440-48-4	COBALT	1	21	1.4		
7440-50-8	COPPER	1	360	1.4	J	
7439-89-6	IRON	10	47000	140		
7439-92-1	LEAD	10	1300	4.3		
7439-95-4	MAGNESIUM	1	8500	140	J	
7439-96-5	MANGANESE	10	11000	14	J	
7440-02-0	NICKEL	1	24	2.8		
7440-09-7	POTASSIUM	1	1400	140		
7782-49-2	SELENIUM	10	7.1	7.1	U	
7440-22-4	SILVER	1	7.6	1.4		
7440-23-5	SODIUM	1	140	140	U	
7440-28-0	THALLIUM	10	14	14	U	
7440-62-2	VANADIUM	1	26	1.4		
7440-66-6	ZINC	10	8700	28	J	

Data Package ID: IT0310175-1

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Total ICP Metals

Method SW6010

Sample Results

Lab Name: Paragon Analytics, Inc.

Work Order Number: 0310175

Client Name: URS Operating Services, Inc.

ClientProject ID: Rico Argentine

Field ID: RA-SD-09
Lab ID: 0310175-9

Sample Matrix: SEDIMENT

% Moisture: 37

Date Collected: 22-Oct-03

Date Extracted: 31-Oct-03

Date Analyzed: 31-Oct-03

Prep Batch: IP031031-2

QCBatchID: IP031031-2-1

Run ID: IT031031-1A1

Cleanup: NONE

Basis: Dry Weight

Sample Allotment: 1 g

Final Volume: 100 ml

Result Units: mg/kg

Clean DF: 1

File Name: TS31031

CASNO	Target Analyte	Dilution Factor	Result	Reporting Limit	Result Qualifier	EPA Qualifier
7429-90-5	ALUMINUM	1	5400	32		
7440-36-0	ANTIMONY	1	10	3.2	J	
7440-38-2	ARSENIC	1	16	1.6	J	
7440-39-3	BARIUM	1	42	16	J	
7440-41-7	BERYLLIUM	1	2.6	0.79		
7440-43-9	CADMIUM	20	26	16		
7440-70-2	CALCIUM	1	11000	160	J	
7440-47-3	CHROMIUM	1	5.5	1.6		
7440-48-4	COBALT	1	13	1.6		
7440-50-8	COPPER	1	720	1.6	J	
7439-89-6	IRON	20	370000	320		
7439-92-1	LEAD	20	920	9.5		
7439-95-4	MAGNESIUM	1	2000	160	J	
7439-96-5	MANGANESE	1	1500	1.6	J	
7440-02-0	NICKEL	1	20	3.2		
7440-09-7	POTASSIUM	1	1100	160		
7782-49-2	SELENIUM	20	16	16	U	
7440-22-4	SILVER	1	6.5	1.6		
7440-23-5	SODIUM	1	160	160	U	
7440-28-0	THALLIUM	20	32	32	U	
7440-62-2	VANADIUM	1	17	1.6		
7440-66-6	ZINC	20	6500	63	J	

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Data Package ID: IT0310175-1

Total ICP Metals

Method SW6010

Sample Results

Lab Name: Paragon Analytics, Inc.

Work Order Number: 0310175

Client Name: URS Operating Services, Inc.

ClientProject ID: Rico Argentine

Field ID: RA-SD-GR-1D1
Lab ID: 0310175-10

Sample Matrix: SOIL
% Moisture: 3.7
Date Collected: 20-Oct-03
Date Extracted: 31-Oct-03
Date Analyzed: 31-Oct-03

Prep Batch: IP031031-2
QCBatchID: IP031031-2-1
Run ID: IT031031-1A1
Cleanup: NONE
Basis: Dry Weight

Sample Aliquot: 1g
Final Volume: 100 ml
Result Units: mg/kg
Clean DF: 1
File Name: TS31031

CASNO	Target Analyte	Dilution Factor	Result	Reporting Limit	Result Qualifier	EPA Qualifier
7429-90-5	ALUMINUM	1	5200	21		
7440-36-0	ANTIMONY	1	2.1	2.1	U UJ	
7440-38-2	ARSENIC	1	5.9	1	J	
7440-39-3	BARIUM	1	260	10	J	
7440-41-7	BERYLLIUM	1	0.55	0.52		
7440-43-9	CADMIUM	1	0.52	0.52	U	
7440-70-2	CALCIUM	1	5000	100	J	
7440-47-3	CHROMIUM	1	7.8	1		
7440-48-4	COBALT	1	5.1	1		
7440-50-8	COPPER	1	12	1	J	
7439-89-6	IRON	1	15000	10		
7439-92-1	LEAD	1	16	0.31		
7439-95-4	MAGNESIUM	1	3300	100	J	
7439-96-5	MANGANESE	1	520	1	J	
7440-02-0	NICKEL	1	7.9	2.1		
7440-09-7	POTASSIUM	1	1100	100		
7782-49-2	SELENIUM	1	0.69	0.52		
7440-22-4	SILVER	1	1	1	U	
7440-23-5	SODIUM	1	100	100	U	
7440-28-0	THALLIUM	1	1	1	U	
7440-62-2	VANADIUM	1	18	1		
7440-66-6	ZINC	1	110	2.1	J	

Data Package ID: IT0310175-1

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Total ICP Metals

Method SW6010

Sample Results

Lab Name: Paragon Analytics, Inc.

Work Order Number: 0310175

Client Name: URS Operating Services, Inc.

Client Project ID: Rico Argentine

Field ID: RA-SH-CO-1S1
Lab ID: 0310175-11

Sample Matrix: SOIL
% Moisture: 10.4
Date Collected: 21-Oct-03
Date Extracted: 31-Oct-03
Date Analyzed: 31-Oct-03

Prep Batch: IP031031-2
QCBatchID: IP031031-2-1
Run ID: IT031031-1A1
Cleanup: NONE
Basis: Dry Weight

Sample Aliquot: 1g
Final Volume: 100 ml
Result Units: mg/kg
Clean DF: 1
File Name: TS31031

CASNO	Target Analyte	Dilution Factor	Result	Reporting Limit	Result Qualifier	EPA Qualifier
7429-90-5	ALUMINUM	1	15000	22		
7440-36-0	ANTIMONY	1	2.2	2.2	U U5	
7440-38-2	ARSENIC	1	18	1.1	J	
7440-39-3	BARIUM	1	120	11	J	
7440-41-7	BERYLLIUM	1	1.1	0.56		
7440-43-9	CADMIUM	5	29	2.8		
7440-70-2	CALCIUM	1	8000	110	J	
7440-47-3	CHROMIUM	1	23	1.1		
7440-48-4	COBALT	1	11	1.1		
7440-50-8	COPPER	1	190	1.1	J	
7439-89-6	IRON	5	36000	56		
7439-92-1	LEAD	5	2000	1.7		
7439-95-4	MAGNESIUM	1	8900	110	J	
7439-96-5	MANGANESE	5	2200	5.6	J	
7440-02-0	NICKEL	1	17	2.2		
7440-09-7	POTASSIUM	1	2100	110		
7782-49-2	SELENIUM	5	2.8	2.8	U	
7440-22-4	SILVER	1	6.2	1.1		
7440-23-5	SODIUM	1	110	110	U	
7440-28-0	THALLIUM	5	5.6	5.6	U	
7440-62-2	VANADIUM	1	32	1.1		
7440-66-6	ZINC	5	4800	11	J	

Data Package ID: IT0310175-1

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Total ICP Metals

Method SW6010

Sample Results

Lab Name: Paragon Analytics, Inc.

Work Order Number: 0310175

Client Name: URS Operating Services, Inc.

ClientProject ID: Rico Argentine

Field ID: RA-SH-DA-1D1	Sample Matrix: SOIL	Prep Batch: IP031031-2	Sample Allquot: 1g
Lab ID: 0310175-12	% Moisture: 12.4	QC Batch ID: IP031031-2-1	Final Volume: 100ml
	Date Collected: 21-Oct-03	Run ID: IT031031-1A1	Result Units: mg/kg
	Date Extracted: 31-Oct-03	Cleanup: NONE	Clean DF: 1
	Date Analyzed: 31-Oct-03	Basis: Dry Weight	File Name: TS31031

CASNO	Target Analyte	Dilution Factor	Result	Reporting Limit	Result Qualifier	EPA Qualifier
7429-90-5	ALUMINUM	1	11000	23		
7440-36-0	ANTIMONY	1	2.3	2.3	U U5	
7440-38-2	ARSENIC	1	13	1.1	J	
7440-39-3	BARIUM	1	90	11	J	
7440-41-7	BERYLLIUM	1	0.83	0.57		
7440-43-9	CADMIUM	2	4.1	1.1		
7440-70-2	CALCIUM	1	3000	110	J	
7440-47-3	CHROMIUM	1	18	1.1		
7440-48-4	COBALT	1	8.6	1.1		
7440-50-8	COPPER	1	110	1.1	J	
7439-89-6	IRON	2	25000	23		
7439-92-1	LEAD	2	550	0.68		
7439-95-4	MAGNESIUM	1	6800	110	J	
7439-96-5	MANGANESE	2	1200	2.3	J	
7440-02-0	NICKEL	1	14	2.3		
7440-09-7	POTASSIUM	1	1500	110		
7782-49-2	SELENIUM	2	1.1	1.1		
7440-22-4	SILVER	1	1.2	1.1		
7440-23-5	SODIUM	1	110	110	U	
7440-28-0	THALLIUM	2	2.3	2.3	U	
7440-62-2	VANADIUM	1	27	1.1		
7440-66-6	ZINC	1	720	2.3	J	

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Data Package ID: IT0310175-1

Total ICP Metals

Method SW6010

Sample Results

Lab Name: Paragon Analytics, Inc.

Work Order Number: 0310175

Client Name: URS Operating Services, Inc.

ClientProject ID: Rico Argentine

Field ID: RA-SO-01
Lab ID: 0310175-13

Sample Matrix: SOIL
% Moisture: 6.3
Date Collected: 21-Oct-03
Date Extracted: 31-Oct-03
Date Analyzed: 31-Oct-03

Prep Batch: IP031031-2
QCBatchID: IP031031-2-1
Run ID: IT031031-1A1
Cleanup: NONE
Basis: Dry Weight

Sample Aliquot: 1g
Final Volume: 100 ml
Result Units: mg/kg
Clean DF: 1
File Name: TS31031

CASNO	Target Analyte	Dilution Factor	Result	Reporting Limit	Result Qualifier	EPA Qualifier
7429-90-5	ALUMINUM	1	14000	21		
7440-36-0	ANTIMONY	1	22	2.1	J	
7440-38-2	ARSENIC	1	42	1.1	J	
7440-39-3	BARIUM	1	97	11	J	
7440-41-7	BERYLLIUM	1	0.86	0.53		
7440-43-9	CADMIUM	20	81	11		
7440-70-2	CALCIUM	1	19000	110	J	
7440-47-3	CHROMIUM	1	17	1.1	J	
7440-48-4	COBALT	1	6.8	1.1		
7440-50-8	COPPER	20	1600	21		
7439-89-6	IRON	20	100000	210	J	
7439-92-1	LEAD	20	16000	6.4		
7439-95-4	MAGNESIUM	1	7900	110	J	
7439-96-5	MANGANESE	20	2000	21	J	
7440-02-0	NICKEL	1	8	2.1		
7440-09-7	POTASSIUM	1	4900	110		
7782-49-2	SELENIUM	20	11	11	U	
7440-22-4	SILVER	1	66	1.1		
7440-23-5	SODIUM	1	110	110	U	
7440-28-0	THALLIUM	20	21	21	U	
7440-62-2	VANADIUM	1	31	1.1		
7440-66-6	ZINC	20	15000	43	J	

Data Package ID: IT0310175-1

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Total ICP Metals

Method SW6010

Sample Results

Lab Name: Paragon Analytics, Inc.

Work Order Number: 0310175

Client Name: URS Operating Services, Inc.

ClientProject ID: Rico Argentine

Field ID: RA-SO-010
Lab ID: 0310175-14

Sample Matrix: SOIL
% Moisture: 8
Date Collected: 22-Oct-03
Date Extracted: 31-Oct-03
Date Analyzed: 31-Oct-03

Prep Batch: IP031031-2
QCBatchID: IP031031-2-1
Run ID: IT031031-1A1
Cleanup: NONE
Basis: Dry Weight

Sample Aliquot: 1g
Final Volume: 100ml
Result Units: mg/kg
Clean DF: 1
File Name: TS31031

CASNO	Target Analyte	Dilution Factor	Result	Reporting Limit	Result Qualifier	EPA Qualifier
7429-90-5	ALUMINUM	1	6800	22		
7440-36-0	ANTIMONY	1	2.2	2.2	U U5	
7440-38-2	ARSENIC	1	6	1.1	J	
7440-39-3	BARIUM	1	690	11	J	
7440-41-7	BERYLLIUM	1	0.54	0.54	U	
7440-43-9	CADMIUM	1	0.54	0.54	U	
7440-70-2	CALCIUM	1	40000	110	J	
7440-47-3	CHROMIUM	1	8.1	1.1		
7440-48-4	COBALT	1	6.9	1.1		
7440-50-8	COPPER	1	18	1.1	J	
7439-89-6	IRON	1	19000	11		
7439-92-1	LEAD	1	27	0.33		
7439-95-4	MAGNESIUM	1	4100	110	J	
7439-96-5	MANGANESE	1	740	1.1	J	
7440-02-0	NICKEL	1	7.2	2.2		
7440-09-7	POTASSIUM	1	2400	110		
7782-49-2	SELENIUM	1	0.61	0.54		
7440-22-4	SILVER	1	1.1	1.1	U	
7440-23-5	SODIUM	1	1900	110		
7440-28-0	THALLIUM	1	1.1	1.1	U	
7440-62-2	VANADIUM	1	30	1.1		
7440-66-6	ZINC	1	100	2.2	J	

Data Package ID: IT0310175-1

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Total ICP Metals

Method SW6010

Sample Results

Lab Name: Paragon Analytics, Inc.

Work Order Number: 0310175

Client Name: URS Operating Services, Inc.

Client Project ID: Rico Argentine

Field ID: RA-SO-011
Lab ID: 0310175-15

Sample Matrix: SOIL
% Moisture: 95.7
Date Collected: 22-Oct-03
Date Extracted: 31-Oct-03
Date Analyzed: 31-Oct-03

Prep Batch: IP031031-2
QCBatchID: IP031031-2-1
Run ID: IT031031-1A1
Cleanup: NONE
Basis: Dry Weight

Sample Aliquot: 1g
Final Volume: 100 ml
Result Units: mg/kg
Clean DF: 1
File Name: TS31031

CASNO	Target Analyte	Dilution Factor	Result	Reporting Limit	Result Qualifier	EPA Qualifier
7429-90-5	ALUMINUM	1	95000	470		
7440-36-0	ANTIMONY	1	47	47	U U5	
7440-38-2	ARSENIC	1	140	23	J	
7440-39-3	BARIUM	1	270	230	J	
7440-41-7	BERYLLIUM	1	45	12		
7440-43-9	CADMIUM	3	290	35		
7440-70-2	CALCIUM	1	35000	2300	J	
7440-47-3	CHROMIUM	1	100	23		
7440-48-4	COBALT	1	69	23		
7440-50-8	COPPER	1	15000	23	J	
7439-89-6	IRON	3	610000	700	mu/19/03	
7439-92-1	LEAD	3	2300	21	J	
7439-95-4	MAGNESIUM	1	37000	2300	J	
7439-96-5	MANGANESE	1	18000	23	J	
7440-02-0	NICKEL	1	86	47		
7440-09-7	POTASSIUM	1	8600	2300		
7782-49-2	SELENIUM	3	35	35	U	
7440-22-4	SILVER	1	23	23	U	
7440-23-5	SODIUM	1	2300	2300	U	
7440-28-0	THALLIUM	3	70	70	U	
7440-62-2	VANADIUM	1	110	23		
7440-66-6	ZINC	3	60000	140	J	

Data Package ID: IT0310175-1

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Total ICP Metals

Method SW6010

Sample Results

Lab Name: Paragon Analytics, Inc.

Work Order Number: 0310175

Client Name: URS Operating Services, Inc.

ClientProject ID: Rico Argentine

Field ID: RA-SO-012
Lab ID: 0310175-16

Sample Matrix: SOIL
% Moisture: 13.9
Date Collected: 22-Oct-03
Date Extracted: 31-Oct-03
Date Analyzed: 31-Oct-03

Prep Batch: IP031031-2
QCBatchID: IP031031-2-1
Run ID: IT031031-1A1
Cleanup: NONE
Basis: Dry Weight

Sample Allquot: 1 g
Final Volume: 100 ml
Result Units: mg/kg
Clean DF: 1
File Name: TS31031

CASNO	Target Analyte	Dilution Factor	Result	Reporting Limit	Result Qualifier	EPA Qualifier
7429-90-5	ALUMINUM	1	4300	23		
7440-36-0	ANTIMONY	1	12	2.3	J	
7440-38-2	ARSENIC	1	13	1.2	J	
7440-39-3	BARIUM	1	75	12	J	
7440-41-7	BERYLLIUM	1	0.58	0.58	U	
7440-43-9	CADMIUM	20	12	12	U	
7440-70-2	CALCIUM	1	8000	120	J	
7440-47-3	CHROMIUM	1	5.5	1.2		
7440-48-4	COBALT	1	9.3	1.2		
7440-50-8	COPPER	1	200	1.2	J	
7439-89-6	IRON	20	450000	230		
7439-82-1	LEAD	20	940	7		
7439-95-4	MAGNESIUM	1	2000	120	J	
7439-96-5	MANGANESE	1	560	1.2	J	
7440-02-0	NICKEL	1	13	2.3		
7440-09-7	POTASSIUM	1	2600	120		
7782-49-2	SELENIUM	20	12	12	U	
7440-22-4	SILVER	1	20	1.2		
7440-23-5	SODIUM	1	120	120	U	
7440-28-0	THALLIUM	20	23	23	U	
7440-62-2	VANADIUM	1	22	1.2		
7440-66-6	ZINC	1	490	2.3	J	

Data Package ID: IT0310175-1

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Total MERCURY

Method SW7471

Sample Results

Lab Name: Paragon Analytics, Inc.

Client Name: URS Operating Services, Inc.

Client Project ID: Rico Argentine

Work Order Number: 0310175

Reporting Basis: Dry Weight

Final Volume: 100 ml

Matrix: SOIL

Result Units: mg/kg

Client Sample ID	Lab ID	Date Collected	Date Prepared	Date Analyzed	Percent Moisture	Dilution Factor	Result	Reporting Limit	Flag	Sample Aliquot
RA-GL-LA-1S4	0310175-1	10/21/2003	10/29/2003	10/30/2003	12.7	1	0.21	0.11		0.6 g
RA-HA-LI-1S2	0310175-2	10/16/2003	10/29/2003	10/30/2003	8.6	1	0.27	0.11		0.6 g
RA-HA-RB-01	0310175-3	10/20/2003	10/29/2003	10/30/2003	9.3	1	0.34	0.11		0.6 g
RA-HA-RB-02	0310175-4	10/20/2003	10/29/2003	10/30/2003	12.3	1	0.72	0.11		0.6 g
RA-HA-RB-03	0310175-5	10/20/2003	10/29/2003	10/30/2003	12.1	1	0.85	0.11		0.6 g
RA-HA-RB-04	0310175-6	10/20/2003	10/29/2003	10/30/2003	18.6	1	0.21	0.12		0.6 g
RA-SD-GR-1D1	0310175-10	10/20/2003	10/29/2003	10/30/2003	3.7	1	0.1	0.1	U	0.6 g
RA-SH-CO-1S1	0310175-11	10/21/2003	10/29/2003	10/30/2003	10.4	1	0.18	0.11		0.6 g
RA-SH-DA-1D1	0310175-12	10/21/2003	10/29/2003	10/30/2003	12.4	1	0.11	0.11	U	0.6 g
RA-SO-01	0310175-13	10/21/2003	10/29/2003	10/30/2003	6.3	1	0.75	0.11		0.6 g
RA-SO-010	0310175-14	10/22/2003	10/29/2003	10/30/2003	8	1	0.11	0.11	U	0.6 g
RA-SO-011	0310175-15	10/22/2003	10/29/2003	10/30/2003	95.7	1	2.3	2.3	U	0.6 g
RA-SO-012	0310175-16	10/22/2003	10/29/2003	10/30/2003	13.9	1	0.12	0.12	U	0.6 g

Comments:

1. ND or U = Not Detected at or above the client requested detection limit.

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Total MERCURY

Method SW7471

Sample Results

Lab Name: Paragon Analytics, Inc.

Client Name: URS Operating Services, Inc.

Client Project ID: Rico Argentine

Work Order Number: 0310175

Reporting Basis: Dry Weight

Final Volume: 100 ml

Matrix: SEDIMENT

Result Units: mg/kg

Client Sample ID	Lab ID	Date Collected	Date Prepared	Date Analyzed	Percent Moisture	Dilution Factor	Result	Reporting Limit	Flag	Sample Aliquot
RA-SD-07	0310175-7	10/21/2003	10/29/2003	10/30/2003	14.3	1	0.12	0.12	U	0.6 g
RA-SD-08	0310175-8	10/21/2003	10/29/2003	10/30/2003	29.8	1	0.14	0.14	U	0.6 g
RA-SD-09	0310175-9	10/22/2003	10/29/2003	10/30/2003	37	1	0.16	0.16	U	0.6 g

Comments:

1. ND or U = Not Detected at or above the client requested detection limit.

Data Package ID: HG0310175-1

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CYANIDE, TOTAL

Method SW9014

Sample Results

Lab Name: Paragon Analytics, Inc.
Client Name: URS Operating Services, Inc.
Client Project ID: Rico Argentine
Work Order Number: 0310175
Reporting Basis: Dry Weight

Final Volume: 50 ml
Matrix: SOIL
Result Units: mg/kg

Client Sample ID	Lab ID	Date Collected	Date Prepared	Date Analyzed	Percent Moisture	Dilution Factor	Result	Reporting Limit	Flag	Sample Allquot
RA-GL-LA-1S4	0310175-1	10/21/2003	10/30/2003	10/30/2003	12.7	1	0.57	0.57	U	1 g
RA-HA-LI-1S2	0310175-2	10/16/2003	10/27/2003	10/27/2003	8.8	1	0.55	0.55	U	1 g
RA-HA-RB-01	0310175-3	10/20/2003	10/29/2003	10/29/2003	9.3	1	0.55	0.55	U	1 g
RA-HA-RB-02	0310175-4	10/20/2003	10/29/2003	10/29/2003	12.3	1	0.57	0.57	U	1 g
RA-HA-RB-03	0310175-5	10/20/2003	10/29/2003	10/29/2003	12.1	1	28	0.57		1 g
RA-HA-RB-04	0310175-6	10/20/2003	10/29/2003	10/29/2003	18.8	1	1	0.62		1 g
RA-SD-GR-1D1	0310175-10	10/20/2003	10/30/2003	10/30/2003	3.7	1	0.52	0.52	U	1 g
RA-SH-CO-1S1	0310175-11	10/21/2003	10/30/2003	10/30/2003	10.4	1	0.56	0.56	U	1 g
RA-SH-DA-1D1	0310175-12	10/21/2003	10/30/2003	10/30/2003	12.4	1	0.57	0.57	U	1 g
RA-SO-01	0310175-13	10/21/2003	10/30/2003	10/30/2003	6.3	1	0.53	0.53	U	1 g
RA-SO-010	0310175-14	10/22/2003	10/30/2003	10/30/2003	8	1	0.54	0.54	U	1 g
RA-SO-011	0310175-15	10/22/2003	10/30/2003	10/30/2003	95.7	1	12	12	U	1 g
RA-SO-012	0310175-16	10/22/2003	10/30/2003	10/30/2003	13.9	1	2.2	0.58		1 g

Comments:

1. ND or U = Not Detected at or above the client requested detection limit.

Data Package ID: CN0310175-1

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CYANIDE, TOTAL

Method SW9014

Sample Results

Lab Name: Paragon Analytics, Inc.
Client Name: URS Operating Services, Inc.
Client Project ID: Rico Argentine
Work Order Number: 0310175
Reporting Basis: Dry Weight

Final Volume: 50 ml
Matrix: SEDIMENT
Result Units: mg/kg

Client Sample ID	Lab ID	Date Collected	Date Prepared	Date Analyzed	Percent Moisture	Dilution Factor	Result	Reporting Limit	Flag	Sample Allquot
RA-SD-07	0310175-7	10/21/2003	10/30/2003	10/30/2003	14.3	1	0.58	0.58	U	1 g
RA-SD-08	0310175-8	10/21/2003	10/30/2003	10/30/2003	29.8	1	0.71	0.71	U	1 g
RA-SD-09	0310175-9	10/22/2003	10/30/2003	10/30/2003	37	1	0.79	0.79	U	1 g

Comments:

1. ND or U = Not Detected at or above the client requested detection limit.

Data Package ID: CN0310175-1

M 11/19/03

Date Printed: Wednesday, November 05, 2003

Paragon Analytics Inc.

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**REGION VIII
DATA VALIDATION REPORT
INORGANIC**

TDD No.	Site Name		Operable Unit
0308-0013	Rico Argentine		
RPM/OSC Name			
Luke Chavez			
Contractor Laboratory	Contract No.	SDG No.	Laboratory DPO/Region
Paragon Analytics, Inc.	NA	0310132	

Review Assigned Date November 6, 2003

Data Validator Mark McDaniel

Review Completion Date November 20, 2003

Station Number	Laboratory ID	Matrix	Analysis
RA-SD-01	0310132-1	Sediment	Metals by SW-846 methods 6010B, and 7471A. Total cyanide by SW-846 method 9014.
RA-SD-03	0310132-2		
RA-SD-04	0310132-3		
RA-SD-05	0310132-4		
RA-SD-06	0310132-5		
RA-SW-01	0310132-6	Water	Dissolved metals by SW-846 methods 6010B and 7470A. Total cyanide by SW-846 method 9014.
RA-SW-03	0310132-8		
RA-SW-04	0310132-10		
RA-SW-05	0310132-12		
RA-SW-06	0310132-14		
RA-SW-01	0310132-7		Total metals by SW-846 methods 6010B and 7470A.
RA-SW-03	0310132-9		
RA-SW-04	0310132-11		
RA-SW-05	0310132-13		

UOS

URS Operating Services, Inc.

Data Validation Report

Station Number	Laboratory ID	Matrix	Analysis
RA-SW-06	0310132-15	Water	Total metals by SW-846 methods 6010B and 7470A.

DATA QUALITY STATEMENT

- () Data are ACCEPTABLE according to EPA Functional guidelines with no qualifiers (flags) added by the reviewer.
- () Data are UNACCEPTABLE according to EPA Functional Guidelines.
- (X) Data are acceptable with QUALIFICATIONS noted in review.

Telephone/Communication Logs Enclosed? Yes _____ No X

TPO Attention Required? Yes _____ No X If yes, list the items that require attention:

INORGANIC DATA QUALITY ASSURANCE REVIEW

REVIEW NARRATIVE SUMMARY

This data package was reviewed according to "USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Data Review," February 1994, modified for the methods used.

Raw data were reviewed for completeness and transcription accuracy onto the summary forms. Approximately 10-20% of the results reported in each of the samples, calibrations, and QC analyses were recalculated and verified. If problems were identified during the recalculation of results, a more thorough calculation check was performed.

SDG No. 0310132 consisted of 5 sediment samples and 10 water samples for total recoverable or dissolved metals by 6010B, 7470A and 7471A, as well as total cyanide by 9014.

The following table lists the data qualifiers added to the sample analyses. Please see Data Qualifier Definitions, attached to the end of this report.

Sample ID	Elements	Qualifiers	Reason for Qualification	Review Section
RA-SW-01 (T) RA-SW-01 (D) RA-SW-03 (T) RA-SW-03 (D) RA-SW-04 (T) RA-SW-04 (D) RA-SW-05 (T) RA-SW-05 (D) RA-SW-06 (T) RA-SW-06 (D)	Ca, Mg	J/UJ	Serial dilution %D greater than 10% and original sample value at least 50*MDL.	XV

Method/SOW Number 6010B, 7471A, 7470A and 9014

Revision _____

Inorganic Deliverables Completeness Checklist

- P Inorganic Cover Page
- P Inorganic Analysis Data Sheets
- P Initial Calibration and Calibration Verification Results
- P Continuing Calibration Verification Results
- P CRDL Standard for ICP and AA
- P Blank Analysis Results
- P ICP Interference Check Sample Results
- P Spiked Sample Results
- P Post-digest Spiked Sample Analysis
- R Duplicate Sample Results
- NP Instrument Detection Limits
- P Laboratory Control Sample Results
- P Standard Addition Results
- P ICP Serial Dilution Results
- NA Holding Times Summary Sheet
- P ICP Interelement Correction Factors
- P ICP Linear Ranges
- P Raw Data
 - P Samples P Calibration Standards P Blanks P Spikes
 - P Duplicates P ICP QC (ICS and Serial Dilution) P LCS
 - NA Cr6 P Mercury Analysis P Cyanide Analysis
- P Percent Solids Calculations - Solids Only
- P Sample Prep/Digestion Logs (Form XIII)
- P Analysis Run Log (Form XIV)
- P Chain-of-Custody
- P Sample Description
- P Case Narrative
- P Method References

KEY:

- P** = Provided in original data package, as required by the SOW
- R** = Provided as Resubmission
- NP** = Not provided in original data package or as resubmission
- NR** = Not required under the SOW
- NA** = Not applicable to this data package or analysis

I. DELIVERABLES

All deliverables were present as specified in the Statement of Work.

Yes ___ No X

Comments: The laboratory provided QA/QC summary reports, however, these summary reports are not considered CLP equivalent forms.

II. HOLDING TIMES AND PRESERVATION CRITERIA

All holding times and preservation criteria were met.

Yes ___ No X

Comments: Temperature of samples upon receipt was 11°C. The preservation requirements are 4°C(±2°C). The pH of all water samples was < 2, thus no qualifications are necessary.

III. INSTRUMENT CALIBRATIONS: STANDARDS AND BLANKS

Initial instrument calibrations were performed according to requirements.

Yes X No ___

Comments: None.

The instruments were calibrated daily and each time an analysis run was performed.

Yes X No ___

Comments: None.

The instruments were calibrated using one blank and the appropriate number of standards.

Yes X No ___

Comments: None.

IV. FORM 1 - SAMPLE ANALYSIS RESULTS

Sample analyses were entered correctly on Form Is.

Yes X No ___

Comments: None.

V. FORM 2A - INITIAL AND CONTINUING CALIBRATION VERIFICATION

The initial and continuing calibration verification standards (ICV and CCV, respectively) met requirements.

Yes X No ___

Comments: None.

The calibration verification results were within 90-110% recovery for metals, 80-120% for mercury, and 85-115% for cyanide.

Yes X No ___

Comments: None.

The continuing calibration standards were run at 10% frequency.

Yes X No ___

Comments: Continuing calibration blanks were run every 10 samples.

VI. FORM 2B - CRDL STANDARD FOR ICP AND AA

ICP Analysis: Standards (CRI) at two times the CRDL or the IDL (whichever were greater) were analyzed at the beginning and the end of each sample run.

Yes X No ___ NA ___

Comments: None.

GFAA Analysis: Standards (CRA) at two times CRDL were analyzed at the beginning of each sample run.

Yes___ No___ NA X

Comments: Samples were not analyzed by GFAA.

The CRI and/or the CRA were analyzed after the ICV.

Yes X No___

Comments: None.

VII. FORM 3 - BLANKS

The initial and continuing calibration blanks (ICB and CCB, respectively) met requirements.

Yes X No___

Comments: None.

The continuing calibration blanks were run at 10% frequency.

Yes X No___

Comments: Continuing calibration blanks were run every 10 samples.

A laboratory/preparation blank was run at the frequency of one per twenty samples, or per sample delivery group (whichever is more frequent), and for each matrix analyzed.

Yes X No___

Comments: None.

All analyzed blanks were free of contamination.

Yes X No___

Comments: None.

VIII. FORM 4 - ICP INTERFERENCE CHECK SAMPLE

The ICP interference check sample (ICS) was run twice per eight hour shift and/or at the beginning and end of each sample set analysis sequence (whichever is more frequent).

Yes X No ___ NA ___

Comments: None.

Percent recovery of the analytes in solution ICSAB were within the range of 80-120%.

Yes X No ___ NA ___

Comments: Potassium, and sodium were not included in the ICSAB analysis and were therefore not evaluated.

IX. FORM 5A - MATRIX SPIKE SAMPLE ANALYSIS

A matrix spike sample was analyzed with every twenty or fewer samples of a similar matrix, or one per sample delivery group (whichever is more frequent).

Yes X No ___

Comments: Because this SDG consisted of both waters and sediments and was the first for this sampling event, the matrix QC (MS, MSD, serial dilution and duplicate sample analysis) was performed on one water sample and none of the sediment samples. Therefore matrix effects for the five sediment samples can not be evaluated.

The percent recoveries (%R) were calculated correctly.

$$\% \text{ Recovery} = \frac{(SSR - SR)}{SA} \times 100$$

SSR = spiked sample result
 SR = sample result
 SA = spike added

Yes X No ___

Comments: None.

Spike recoveries were within the range of 75-125% (an exception is granted where the sample concentration is four times the spike concentration).

Yes X No ___

Comments: None.

X. FORM 5B - POST DIGEST SPIKE RECOVERY

A post-digest spike was performed for those elements that did not meet the specified criteria (i.e., Pre-digestion/pre-distillation spike recovery falls outside of control limits and sample result is less than four times the spike amount added, exception: Ag, Hg).

Yes X No ___ Not Required ___

Comments: Because this SDG consisted of both waters and sediments and was the first for this sampling event, the matrix QC (MS, MSD, serial dilution and duplicate sample analysis) was performed on one water sample and none of the sediment samples. Therefore matrix effects for the five sediment samples can not be evaluated.

XI. FORM 6 - DUPLICATE SAMPLE ANALYSIS

Duplicate sample analysis was performed with every twenty or fewer samples of a similar matrix, or one per sample delivery group (whichever is more frequent).

Yes X No ___

Comments: Because this SDG consisted of both waters and sediments and was the first for this sampling event, the matrix QC (MS, MSD, serial dilution and duplicate sample analysis) was performed on one water sample and none of the sediment samples. Therefore matrix effects for the five sediment samples can not be evaluated.

The RPDs were calculated correctly.

$$RPD = \frac{(S - D)}{(S + D)/2} \times 100$$

S = sample
D = duplicate

Yes X No ___

Comments: None.

For sample concentrations greater than five times the CRDL, RPDs were within ±20% (limits of ±35% apply for soil/sediments/tailings samples).

Yes X No ___

Comments: None.

For sample concentrations less than five times the CRDL, duplicate analysis results were within the control window of ± CRDL (two times CRDL for soils).

Yes X No ___

Comments: None.

XII. GFAA QC

Duplicate injections were performed on all GFAA samples and the RSD was within $\pm 20\%$.

Yes___ No___ NA X

Comments: GFAA analyses were not performed on these samples.

Analytical spikes were performed on all GFAA samples and the percent recovery was 85 - 115%.

Yes___ No___ NA X

Comments: None.

MSAs were analyzed when required and the correlation coefficient was > 0.995 .

Yes___ No___ NA X

Comments: None.

XIII. FORM 7 - LABORATORY CONTROL SAMPLE

The laboratory control sample (LCS) was prepared and analyzed with every twenty or fewer samples of a similar matrix, or one per sample delivery group (whichever is more frequent).

Yes X No___

Comments: None.

All results were within control limits.

Yes X No___

Comments: None.

XIV. FORM 8 - STANDARD ADDITION RESULTS

Results from graphite furnace standard additions were entered on Form VIII as directed in the method.

Yes___ No___ NA X

Comments: None.

XV. FORM 9 - ICP QC

A serial dilution was performed for ICP analysis with every twenty or fewer samples of a similar matrix, or one per sample delivery group, whichever is more frequent.

Yes X No ___ NA ___

Comments: Because this SDG consisted of both waters and sediments and was the first for this sampling event, the matrix QC (MS, MSD, serial dilution and duplicate sample analysis) was performed on one water sample and none of the sediment samples. Therefore matrix effects for the five sediment samples can not be evaluated.

The serial dilution was without interference problems.

Yes ___ No X NA ___

The following table details compounds where the 10% D between the serial dilution and original results were greater than 10% and the original value was at least 50*MDL:

Element	Reason for Qualification	Matrix	Samples Affected	Qualifiers
Ca, Mg	Serial dilution %D greater than 10% and original sample value at least 50*MDL.	Soil	RA-SW-01 RA-SW-01 RA-SW-03 RA-SW-03 RA-SW-04 RA-SW-04 RA-SW-05 RA-SW-05 RA-SW-06 RA-SW-06	J/UJ

XVI. FORM 10 - QUARTERLY INSTRUMENT DETECTION LIMITS (IDL)

IDLs were provided for all elements on the target analyte list.

Yes ___ No X

Comments: IDLs and MDLs were not provided.

Reported IDLs met requirements.

Yes___ No X

Comments: Form 10 equivalent was not provided.

XVII. FORM 11 - INTERELEMENT CORRECTION FACTORS FOR ICP

Interelement corrections for ICP were reported.

Yes X No___ NA___

Comments: None.

XVIII. FORM 12 - ICP LINEAR RANGES

ICP linear ranges were reported.

Yes X No___ NA___

Comments: None.

XIX. LINEAR RANGE VERIFICATION ANALYSIS

Linear Range Verification Analysis (LRA) was performed and results were within control limits of $\pm 5\%$ of the true value.

Yes___ No___ NA X

Comments: None.

XX. FORM 13 - PREPARATION LOG

Information on the preparation of samples for analysis was reported on Form XIII.

Yes X No___

Comments: None.

XXI. FORM 14 - ANALYSIS RUN LOG

XXI. FORM 14 - ANALYSIS RUN LOG

A Form XIV with the required information was filled out for each analysis run in the data package.

Yes X No

Comments: None.

XXII. Additional Comments or Problems/Resolutions Not Addressed Above

Yes No X

Comments: None.

INORGANIC DATA QUALITY ASSURANCE REVIEW**Region VIII****DATA QUALIFIER DEFINITIONS**

For the purpose of Data Validation, the following code letters and associated definitions are provided for use by the data validator to summarize the data quality. Use of additional qualifiers should be carefully considered. Definitions for all qualifiers used should be provided with each report.

GENERAL QUALIFIERS for use with both INORGANIC and ORGANIC DATA

- R** - Reported value is "rejected." Resampling or reanalysis may be necessary to verify the presence or absence of the compound.
- J** - The associated numerical value is an estimated quantity because the Quality Control criteria were not met.
- UJ** - The reported amount is estimated because Quality Control criteria were not met. Element or compound was not detected.
- NJ** - The analysis indicates the presence of an analyte that has been "tentatively identified" and the associated numerical value represents its approximate concentration.
- N** - The analysis indicates the presence of an analyte for which there is presumptive evidence to make a tentative identification.
- U** - The material was analyzed for, but was not-detected above the level of the associated value. The associated value is either the sample quantitation limit or the sample detection limit.

ACRONYMS

AA	Atomic Absorption
Ag	Silver
CCB	Continuing Calibration Blank
CCV	Continuing Calibration Verification
CFR	Code of Federal Regulations
CLP	Contract Laboratory Program
CRA	CRDL standard required for AA
CRDL	Contract Required Detection Limit
CRI	CRDL standard required for ICP
CV	Cold Vapor
EPA	U.S. Environmental Protection Agency
GFAA	Graphite Furnace Atomic Absorption
Hg	Mercury
ICB	Initial Calibration Blank
ICP	Inductively Coupled Plasma
ICS	Interference Check Sample
ICSA	Interference Check Sample (Solution A)
ICSAB	Interference Check Sample (Solution AB)
ICV	Initial Calibration Verification
IDL	Instrument Detection Limit
LCS	Laboratory Control Sample
LRA	Linear Range Verification Analysis
MSA	Method of Standard Additions
PDS	Post Digestion Spike
QC	Quality Control
RPD	Relative Percent Difference
RPM	Regional Project Manager
RSD	Percent Relative Standard Deviation
SA	Spike Added
SAS	Special Analytical Services
SDG	Sample Delivery Group
SOW	Statement of Work
SR	Sample Result
SSR	Spiked Sample Result
TPO	Technical Project Officer

Dissolved ICP Metals

Method SW6010

Sample Results

Lab Name: Paragon Analytics, Inc.

Work Order Number: 0310132

Client Name: URS Operating Services, Inc.

Client Project ID: Rico Argentine 36547730

Field ID: RA-SW-01
Lab ID: 0310132-6

Sample Matrix: WATER
% Moisture: N/A
Date Collected: 17-Oct-03
Date Extracted: 22-Oct-03
Date Analyzed: 23-Oct-03

Prep Batch: IP031022-1
QCBatchID: IP031022-1-1
Run ID: IT031023-1A1
Cleanup: NONE
Basis: As Received

Sample Aliquot: 50 g
Final Volume: 50 g
Result Units: mg/l
Clean DF: 1
File Name: TS31023

CASNO	Target Analyte	Dilution Factor	Result	Reporting Limit	Result Qualifier	EPA Qualifier
7429-90-5	ALUMINUM	1	0.2	0.2	U	
7440-36-0	ANTIMONY	1	0.02	0.02	U	
7440-38-2	ARSENIC	1	0.01	0.01	U	
7440-39-3	BARIUM	1	0.1	0.1	U	
7440-41-7	BERYLLIUM	1	0.005	0.005	U	
7440-43-9	CADMIUM	1	0.005	0.005	U	
7440-70-2	CALCIUM	1	35	1		J
7440-47-3	CHROMIUM	1	0.01	0.01	U	
7440-48-4	COBALT	1	0.01	0.01	U	
7440-50-8	COPPER	1	0.01	0.01	U	
7439-89-6	IRON	1	0.1	0.1	U	
7439-92-1	LEAD	1	0.003	0.003	U	
7439-95-4	MAGNESIUM	1	5.3	1		J
7439-96-5	MANGANESE	1	0.011	0.01		
7440-02-0	NICKEL	1	0.02	0.02	U	
7440-09-7	POTASSIUM	1	1	1	U	
7782-49-2	SELENIUM	1	0.005	0.005	U	
7440-22-4	SILVER	1	0.01	0.01	U	
7440-23-5	SODIUM	1	2.2	1		
7440-28-0	THALLIUM	1	0.01	0.01	U	
7440-62-2	VANADIUM	1	0.01	0.01	U	
7440-66-6	ZINC	1	0.02	0.02	U	

Data Package ID: IT0310132-1

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11/19/03

Date Printed: Monday, November 03, 2003

Paragon Analytics Inc.

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Total Recoverable ICP Metals

Method SW6010

Sample Results

Lab Name: Paragon Analytics, Inc.

Work Order Number: 0310132

Client Name: URS Operating Services, Inc.

ClientProject ID: Rico Argentine 36547730

Field ID: RA-SW-01
Lab ID: 0310132-7

Sample Matrix: WATER
% Moisture: N/A
Date Collected: 17-Oct-03
Date Extracted: 22-Oct-03
Date Analyzed: 23-Oct-03

Prep Batch: IP031022-1
QCBatchID: IP031022-1-1
Run ID: IT031023-1A1
Cleanup: NONE
Basis: As Received

Sample Aliquot: 50g
Final Volume: 50g
Result Units: mg/l
Clean DF: 1
File Name: TS31023

CASNO	Target Analyte	Dilution Factor	Result	Reporting Limit	Result Qualifier	EPA Qualifier
7429-90-5	ALUMINUM	1	0.2	0.2	U	
7440-36-0	ANTIMONY	1	0.02	0.02	U	
7440-38-2	ARSENIC	1	0.01	0.01	U	
7440-39-3	BARIUM	1	0.1	0.1	U	
7440-41-7	BERYLLIUM	1	0.005	0.005	U	
7440-43-9	CADMIUM	1	0.005	0.005	U	
7440-70-2	CALCIUM	1	35	1		J
7440-47-3	CHROMIUM	1	0.01	0.01	U	
7440-48-4	COBALT	1	0.01	0.01	U	
7440-50-8	COPPER	1	0.01	0.01	U	
7439-89-6	IRON	1	0.1	0.1	U	
7439-92-1	LEAD	1	0.003	0.003	U	
7439-95-4	MAGNESIUM	1	5.4	1		J
7439-96-5	MANGANESE	1	0.01	0.01	U	
7440-02-0	NICKEL	1	0.02	0.02	U	
7440-09-7	POTASSIUM	1	1	1	U	
7782-49-2	SELENIUM	1	0.005	0.005	U	
7440-22-4	SILVER	1	0.01	0.01	U	
7440-23-5	SODIUM	1	2.3	1		
7440-28-0	THALLIUM	1	0.01	0.01	U	
7440-62-2	VANADIUM	1	0.01	0.01	U	
7440-66-6	ZINC	1	0.02	0.02	U	

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11/17/03

Data Package ID: IT0310132-1

Dissolved ICP Metals

Method SW6010

Sample Results

Lab Name: Paragon Analytics, Inc.

Work Order Number: 0310132

Client Name: URS Operating Services, Inc.

ClientProject ID: Rico Argentine 36547730

Field ID: RA-SW-03
Lab ID: 0310132-8

Sample Matrix: WATER
% Moisture: N/A
Date Collected: 17-Oct-03
Date Extracted: 22-Oct-03
Date Analyzed: 23-Oct-03

Prep Batch: IP031022-1
QC Batch ID: IP031022-1-1
Run ID: IT031023-1A1
Cleanup: NONE
Basis: As Received

Sample Aliquot: 50g
Final Volume: 50g
Result Units: mg/l
Clean DF: 1
File Name: TS31023

CASNO	Target Analyte	Dilution Factor	Result	Reporting Limit	Result Qualifier	EPA Qualifier
7429-90-5	ALUMINUM	1	0.2	0.2	U	
7440-36-0	ANTIMONY	1	0.02	0.02	U	
7440-38-2	ARSENIC	1	0.01	0.01	U	
7440-39-3	BARIUM	1	0.1	0.1	U	
7440-41-7	BERYLLIUM	1	0.005	0.005	U	
7440-43-9	CADMIUM	1	0.005	0.005	U	
7440-70-2	CALCIUM	1	62	1		J
7440-47-3	CHROMIUM	1	0.01	0.01	U	
7440-48-4	COBALT	1	0.01	0.01	U	
7440-50-8	COPPER	1	0.01	0.01	U	
7439-89-6	IRON	1	0.1	0.1	U	
7439-92-1	LEAD	1	0.003	0.003	U	
7439-95-4	MAGNESIUM	1	8	1		J
7439-96-5	MANGANESE	1	0.2	0.01		
7440-02-0	NICKEL	1	0.02	0.02	U	
7440-09-7	POTASSIUM	1	1.4	1		
7782-49-2	SELENIUM	1	0.005	0.005	U	
7440-22-4	SILVER	1	0.01	0.01	U	
7440-23-5	SODIUM	1	3.9	1		
7440-28-0	THALLIUM	1	0.01	0.01	U	
7440-62-2	VANADIUM	1	0.01	0.01	U	
7440-66-6	ZINC	1	0.02	0.02	U	

MA 11/19/03

Data Package ID: IT0310132-1

Date Printed: Monday, November 03, 2003

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Total Recoverable ICP Metals

Method SW6010

Sample Results

Lab Name: Paragon Analytics, Inc.

Work Order Number: 0310132

Client Name: URS Operating Services, Inc.

Client Project ID: Rico Argentine 36547730

Field ID: RA-SW-03
Lab ID: 0310132-9

Sample Matrix: WATER
% Moisture: N/A
Date Collected: 17-Oct-03
Date Extracted: 22-Oct-03
Date Analyzed: 23-Oct-03

Prep Batch: IP031022-1
QCBatchID: IP031022-1-1
Run ID: IT031023-1A1
Cleanup: NONE
Basis: As Received

Sample Aliquot: 50 g
Final Volume: 50 g
Result Units: mg/l
Clean DF: 1
File Name: TS31023

CASNO	Target Analyte	Dilution Factor	Result	Reporting Limit	Result Qualifier	EPA Qualifier
7429-90-5	ALUMINUM	1	0.2	0.2	U	
7440-36-0	ANTIMONY	1	0.02	0.02	U	
7440-38-2	ARSENIC	1	0.01	0.01	U	
7440-39-3	BARIUM	1	0.1	0.1	U	
7440-41-7	BERYLLIUM	1	0.005	0.005	U	
7440-43-9	CADMIUM	1	0.005	0.005	U	
7440-70-2	CALCIUM	1	63	1		J
7440-47-3	CHROMIUM	1	0.01	0.01	U	
7440-48-4	COBALT	1	0.01	0.01	U	
7440-50-8	COPPER	1	0.01	0.01	U	
7439-89-6	IRON	1	0.13	0.1		
7439-92-1	LEAD	1	0.003	0.003	U	
7439-95-4	MAGNESIUM	1	8.2	1		J
7439-96-5	MANGANESE	1	0.2	0.01		
7440-02-0	NICKEL	1	0.02	0.02	U	
7440-09-7	POTASSIUM	1	1.4	1		
7782-49-2	SELENIUM	1	0.005	0.005	U	
7440-22-4	SILVER	1	0.01	0.01	U	
7440-23-5	SODIUM	1	3.9	1		
7440-28-0	THALLIUM	1	0.01	0.01	U	
7440-62-2	VANADIUM	1	0.01	0.01	U	
7440-66-6	ZINC	1	0.02	0.02	U	

MM 11/19/03

Data Package ID: IT0310132-1

Dissolved ICP Metals

Method SW6010

Sample Results

Lab Name: Paragon Analytics, Inc.

Work Order Number: 0310132

Client Name: URS Operating Services, Inc.

ClientProject ID: Rico Argentine 36547730

Field ID: RA-SW-04
Lab ID: 0310132-10

Sample Matrix: WATER
% Moisture: N/A
Date Collected: 17-Oct-03
Date Extracted: 22-Oct-03
Date Analyzed: 23-Oct-03

Prep Batch: IP031022-1
QCBatchID: IP031022-1-1
Run ID: IT031023-1A1
Cleanup: NONE
Basis: As Received

Sample Aliquot: 50 g
Final Volume: 50 g
Result Units: mg/l
Clean DF: 1
File Name: TS31023

CASNO	Target Analyte	Dilution Factor	Result	Reporting Limit	Result Qualifier	EPA Qualifier
7429-90-5	ALUMINUM	1	0.2	0.2	U	
7440-36-0	ANTIMONY	1	0.02	0.02	U	
7440-38-2	ARSENIC	1	0.01	0.01	U	
7440-39-3	BARIUM	1	0.1	0.1	U	
7440-41-7	BERYLLIUM	1	0.005	0.005	U	
7440-43-9	CADMIUM	1	0.005	0.005	U	
7440-70-2	CALCIUM	1	62	1		J
7440-47-3	CHROMIUM	1	0.01	0.01	U	
7440-48-4	COBALT	1	0.01	0.01	U	
7440-50-8	COPPER	1	0.01	0.01	U	
7439-89-6	IRON	1	0.1	0.1	U	
7439-92-1	LEAD	1	0.003	0.003	U	
7439-95-4	MAGNESIUM	1	7.9	1		J
7439-96-5	MANGANESE	1	0.18	0.01		
7440-02-0	NICKEL	1	0.02	0.02	U	
7440-09-7	POTASSIUM	1	1.3	1		
7782-49-2	SELENIUM	1	0.005	0.005	U	
7440-22-4	SILVER	1	0.01	0.01	U	
7440-23-5	SODIUM	1	3.6	1		
7440-28-0	THALLIUM	1	0.01	0.01	U	
7440-62-2	VANADIUM	1	0.01	0.01	U	
7440-66-6	ZINC	1	0.095	0.02		

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Data Package ID: IT0310132-1

Total Recoverable ICP Metals

Method SW6010

Sample Results

Lab Name: Paragon Analytics, Inc.

Work Order Number: 0310132

Client Name: URS Operating Services, Inc.

ClientProject ID: Rico Argentine 36547730

Field ID: RA-SW-04

Lab ID: 0310132-11

Sample Matrix: WATER

% Moisture: N/A

Date Collected: 17-Oct-03

Date Extracted: 22-Oct-03

Date Analyzed: 23-Oct-03

Prep Batch: IP031022-1

QCBatchID: IP031022-1-1

Run ID: IT031023-1A1

Cleanup: NONE

Basis: As Received

Sample Aliquot: 50 g

Final Volume: 50 g

Result Units: mg/l

Clean DF: 1

File Name: TS31023

CASNO	Target Analyte	Dilution Factor	Result	Reporting Limit	Result Qualifier	EPA Qualifier
7429-90-5	ALUMINUM	1	0.2	0.2	U	
7440-36-0	ANTIMONY	1	0.02	0.02	U	
7440-36-2	ARSENIC	1	0.01	0.01	U	
7440-39-3	BARIUM	1	0.1	0.1	U	
7440-41-7	BERYLLIUM	1	0.005	0.005	U	
7440-43-9	CADMIUM	1	0.005	0.005	U	
7440-70-2	CALCIUM	1	62	1		J
7440-47-3	CHROMIUM	1	0.01	0.01	U	
7440-48-4	COBALT	1	0.01	0.01	U	
7440-50-8	COPPER	1	0.01	0.01	U	
7439-89-6	IRON	1	0.1	0.1	U	
7439-92-1	LEAD	1	0.003	0.003	U	
7439-95-4	MAGNESIUM	1	7.9	1		J
7439-96-5	MANGANESE	1	0.18	0.01		
7440-02-0	NICKEL	1	0.02	0.02	U	
7440-09-7	POTASSIUM	1	1.3	1		
7782-49-2	SELENIUM	1	0.005	0.005	U	
7440-22-4	SILVER	1	0.01	0.01	U	
7440-23-5	SODIUM	1	3.6	1		
7440-28-0	THALLIUM	1	0.01	0.01	U	
7440-62-2	VANADIUM	1	0.01	0.01	U	
7440-66-6	ZINC	1	0.096	0.02		

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Data Package ID: IT0310132-1

Date Printed: Monday, November 03, 2003

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Dissolved ICP Metals

Method SW6010

Sample Results

Lab Name: Paragon Analytics, Inc.

Work Order Number: 0310132

Client Name: URS Operating Services, Inc.

Client Project ID: Rico Argentine 36547730

Field ID: RA-SW-05
Lab ID: 0310132-12

Sample Matrix: WATER
% Moisture: N/A
Date Collected: 17-Oct-03
Date Extracted: 22-Oct-03
Date Analyzed: 23-Oct-03

Prep Batch: IP031022-1
QCBatchID: IP031022-1-1
Run ID: IT031023-1A1
Cleanup: NONE
Basis: As Received

Sample Aliquot: 50 g
Final Volume: 50 g
Result Units: mg/l
Clean DF: 1
File Name: TS31023

CASNO	Target Analyte	Dilution Factor	Result	Reporting Limit	Result Qualifier	EPA Qualifier
7429-90-5	ALUMINUM	1	0.2	0.2	U	
7440-36-0	ANTIMONY	1	0.02	0.02	U	
7440-38-2	ARSENIC	1	0.01	0.01	U	
7440-39-3	BARIUM	1	0.1	0.1	U	
7440-41-7	BERYLLIUM	1	0.005	0.005	U	
7440-43-9	CADMIUM	1	0.005	0.005	U	
7440-70-2	CALCIUM	1	92	1		J
7440-47-3	CHROMIUM	1	0.01	0.01	U	
7440-48-4	COBALT	1	0.01	0.01	U	
7440-50-8	COPPER	1	0.01	0.01	U	
7439-89-6	IRON	1	0.58	0.1		
7439-92-1	LEAD	1	0.003	0.003	U	
7439-95-4	MAGNESIUM	1	10	1		J
7439-96-5	MANGANESE	1	0.19	0.01		
7440-02-0	NICKEL	1	0.02	0.02	U	
7440-09-7	POTASSIUM	1	1.6	1		
7782-49-2	SELENIUM	1	0.005	0.005	U	
7440-22-4	SILVER	1	0.01	0.01	U	
7440-23-5	SODIUM	1	4.3	1		
7440-28-0	THALLIUM	1	0.01	0.01	U	
7440-62-2	VANADIUM	1	0.01	0.01	U	
7440-66-6	ZINC	1	0.85	0.02		

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Data Package ID: IT0310132-1

Total Recoverable ICP Metals

Method SW6010

Sample Results

Lab Name: Paragon Analytics, Inc.

Work Order Number: 0310132

Client Name: URS Operating Services, Inc.

ClientProject ID: Rico Argentine 36547730

Field ID: RA-SW-05
Lab ID: 0310132-13

Sample Matrix: WATER
% Moisture: N/A
Date Collected: 17-Oct-03
Date Extracted: 22-Oct-03
Date Analyzed: 23-Oct-03

Prep Batch: IP031022-1
QC Batch ID: IP031022-1-1
Run ID: IT031023-1A1
Cleanup: NONE
Basis: As Received

Sample Aliquot: 50 g
Final Volume: 50 g
Result Units: mg/l
Clean DF: 1
File Name: TS31023

CASNO	Target Analyte	Dilution Factor	Result	Reporting Limit	Result Qualifier	EPA Qualifier
7429-90-5	ALUMINUM	1	0.2	0.2	U	
7440-36-0	ANTIMONY	1	0.02	0.02	U	
7440-38-2	ARSENIC	1	0.01	0.01	U	
7440-39-3	BARIUM	1	0.1	0.1	U	
7440-41-7	BERYLLIUM	1	0.005	0.005	U	
7440-43-9	CADMIUM	1	0.005	0.005	U	
7440-70-2	CALCIUM	1	92	1		J
7440-47-3	CHROMIUM	1	0.01	0.01	U	
7440-48-4	COBALT	1	0.01	0.01	U	
7440-50-8	COPPER	1	0.01	0.01	U	
7439-89-6	IRON	1	2.2	0.1		
7439-92-1	LEAD	1	0.003	0.003	U	
7439-95-4	MAGNESIUM	1	10	1		J
7439-96-5	MANGANESE	1	0.37	0.01		
7440-02-0	NICKEL	1	0.02	0.02	U	
7440-09-7	POTASSIUM	1	1.5	1		
7782-49-2	SELENIUM	1	0.005	0.005	U	
7440-22-4	SILVER	1	0.01	0.01	U	
7440-23-5	SODIUM	1	4.2	1		
7440-28-0	THALLIUM	1	0.01	0.01	U	
7440-62-2	VANADIUM	1	0.01	0.01	U	
7440-66-6	ZINC	1	0.94	0.02		

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Data Package ID: IT0310132-1

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Dissolved ICP Metals

Method SW6010

Sample Results

Lab Name: Paragon Analytics, Inc.

Work Order Number: 0310132

Client Name: URS Operating Services, Inc.

ClientProject ID: Rico Argentine 36547730

Field ID:	RA-SW-06
Lab ID:	0310132-14

Sample Matrix: WATER
% Moisture: N/A
Date Collected: 17-Oct-03
Date Extracted: 22-Oct-03
Date Analyzed: 23-Oct-03

Prep Batch: IP031022-1
QCBatchID: IP031022-1-1
Run ID: IT031023-1A1
Cleanup: NONE
Basis: As Received

Sample Aliquot: 50g
Final Volume: 50g
Result Units: mg/l
Clean DF: 1
File Name: TS31023

CASNO	Target Analyte	Dilution Factor	Result	Reporting Limit	Result Qualifier	EPA Qualifier
7429-90-5	ALUMINUM	1	0.2	0.2	U	
7440-36-0	ANTIMONY	1	0.02	0.02	U	
7440-38-2	ARSENIC	1	0.01	0.01	U	
7440-39-3	BARIUM	1	0.1	0.1	U	
7440-41-7	BERYLLIUM	1	0.005	0.005	U	
7440-43-9	CADMIUM	1	0.005	0.005	U	
7440-70-2	CALCIUM	1	64	1		J
7440-47-3	CHROMIUM	1	0.01	0.01	U	
7440-48-4	COBALT	1	0.01	0.01	U	
7440-50-8	COPPER	1	0.01	0.01	U	
7439-89-6	IRON	1	0.1	0.1	U	
7439-92-1	LEAD	1	0.003	0.003	U	
7439-95-4	MAGNESIUM	1	8.2	1		J
7439-96-5	MANGANESE	1	0.21	0.01		
7440-02-0	NICKEL	1	0.02	0.02	U	
7440-09-7	POTASSIUM	1	1.4	1		
7782-49-2	SELENIUM	1	0.005	0.005	U	
7440-22-4	SILVER	1	0.01	0.01	U	
7440-23-5	SODIUM	1	3.8	1		
7440-28-0	THALLIUM	1	0.01	0.01	U	
7440-62-2	VANADIUM	1	0.01	0.01	U	
7440-66-6	ZINC	1	0.087	0.02		

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Data Package ID: IT0310132-1

Total Recoverable ICP Metals

Method SW6010

Sample Results

Lab Name: Paragon Analytics, Inc.

Work Order Number: 0310132

Client Name: URS Operating Services, Inc.

ClientProject ID: Rico Argentine 36547730

Field ID: RA-SW-08
Lab ID: 0310132-15

Sample Matrix: WATER
% Moisture: N/A
Date Collected: 17-Oct-03
Date Extracted: 22-Oct-03
Date Analyzed: 23-Oct-03

Prep Batch: IP031022-1
QCBatchID: IP031022-1-1
Run ID: IT031023-1A1
Cleanup: NONE
Basis: As Received

Sample Aliquot: 50 g
Final Volume: 50 g
Result Units: mg/l
Clean DF: 1
File Name: TS31023

CASNO	Target Analyte	Dilution Factor	Result	Reporting Limit	Result Qualifier	EPA Qualifier
7429-90-5	ALUMINUM	1	0.2	0.2	U	
7440-36-0	ANTIMONY	1	0.02	0.02	U	
7440-38-2	ARSENIC	1	0.01	0.01	U	
7440-39-3	BARIUM	1	0.1	0.1	U	
7440-41-7	BERYLLIUM	1	0.005	0.005	U	
7440-43-9	CADMIUM	1	0.005	0.005	U	
7440-70-2	CALCIUM	1	64	1		J
7440-47-3	CHROMIUM	1	0.01	0.01	U	
7440-48-4	COBALT	1	0.01	0.01	U	
7440-50-8	COPPER	1	0.01	0.01	U	
7439-89-6	IRON	1	0.14	0.1		
7439-92-1	LEAD	1	0.003	0.003	U	
7439-95-4	MAGNESIUM	1	8.2	1		J
7439-96-5	MANGANESE	1	0.22	0.01		
7440-02-0	NICKEL	1	0.02	0.02	U	
7440-09-7	POTASSIUM	1	1.3	1		
7782-49-2	SELENIUM	1	0.005	0.005	U	
7440-22-4	SILVER	1	0.01	0.01	U	
7440-23-5	SODIUM	1	3.8	1		
7440-28-0	THALLIUM	1	0.01	0.01	U	
7440-62-2	VANADIUM	1	0.01	0.01	U	
7440-66-6	ZINC	1	0.081	0.02		

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Data Package ID: IT0310132-1

Dissolved MERCURY

Method SW7470

Sample Results

Lab Name: Paragon Analytics, Inc.
Client Name: URS Operating Services, Inc.
Client Project ID: Rico Argentine 36547730
Work Order Number: 0310132
Reporting Basis: As Received

Final Volume: 20 g
Matrix: WATER
Result Units: mg/l

Client Sample ID	Lab ID	Date Collected	Date Prepared	Date Analyzed	Percent Moisture	Dilution Factor	Result	Reporting Limit	Flag	Sample Aliquot
RA-SW-01	0310132-6	10/17/2003	10/22/2003	10/23/2003	N/A	1	0.0002	0.0002	U	20 g
RA-SW-03	0310132-8	10/17/2003	10/22/2003	10/23/2003	N/A	1	0.0002	0.0002	U	20 g
RA-SW-04	0310132-10	10/17/2003	10/22/2003	10/23/2003	N/A	1	0.0002	0.0002	U	20 g
RA-SW-05	0310132-12	10/17/2003	10/22/2003	10/23/2003	N/A	1	0.0002	0.0002	U	20 g
RA-SW-08	0310132-14	10/17/2003	10/22/2003	10/23/2003	N/A	1	0.0002	0.0002	U	20 g

Comments:

1. ND or U = Not Detected at or above the client requested detection limit.

Data Package ID: HG0310132-1

Date Printed: Monday, November 03, 2003

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Total MERCURY

Method SW7470

Sample Results

Lab Name: Paragon Analytics, Inc.

Client Name: URS Operating Services, Inc.

Client Project ID: Rico Argentine 36547730

Work Order Number: 0310132

Reporting Basis: As Received

Final Volume: 20 g

Matrix: WATER

Result Units: mg/l

Client Sample ID	Lab ID	Date Collected	Date Prepared	Date Analyzed	Percent Moisture	Dilution Factor	Result	Reporting Limit	Flag	Sample Aliquot
RA-SW-01	0310132-7	10/17/2003	10/22/2003	10/23/2003	N/A	1	0.0002	0.0002	U	20 g
RA-SW-03	0310132-9	10/17/2003	10/22/2003	10/23/2003	N/A	1	0.0002	0.0002	U	20 g
RA-SW-04	0310132-11	10/17/2003	10/22/2003	10/23/2003	N/A	1	0.0002	0.0002	U	20 g
RA-SW-05	0310132-13	10/17/2003	10/22/2003	10/23/2003	N/A	1	0.0002	0.0002	U	20 g
RA-SW-06	0310132-15	10/17/2003	10/22/2003	10/23/2003	N/A	1	0.0002	0.0002	U	20 g

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Comments:

1. ND or U = Not Detected at or above the client requested detection limit.

Data Package ID: HG0310132-1

Date Printed: Monday, November 03, 2003

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Total ICP Metals

Method SW6010

Sample Results

Lab Name: Paragon Analytics, Inc.

Work Order Number: 0310132

Client Name: URS Operating Services, Inc.

Client/Project ID: Rico Argentine 36547730

Field ID: RA-SD-01
Lab ID: 0310132-1

Sample Matrix: SEDIMENT

% Moisture: 28.1

Date Collected: 17-Oct-03

Date Extracted: 27-Oct-03

Date Analyzed: 28-Oct-03

Prep Batch: IP031027-2

QCBatchID: IP031027-2-3

Run ID: IT031028-1A1

Cleanup: NONE

Basis: Dry Weight

Sample Aliquot: 1g

Final Volume: 100ml

Result Units: mg/kg

Clean DF: 1

File Name: TS31028

CASNO	Target Analyte	Dilution Factor	Result	Reporting Limit	Result Qualifier	EPA Qualifier
7429-90-5	ALUMINUM	1	6600	28		
7440-36-0	ANTIMONY	1	2.8	2.8	U	
7440-38-2	ARSENIC	1	9.3	1.4		
7440-39-3	BARIUM	1	100	14		
7440-41-7	BERYLLIUM	1	0.7	0.7	U	
7440-43-9	CADMIUM	1	0.7	0.7	U	
7440-70-2	CALCIUM	1	26000	140		
7440-47-3	CHROMIUM	1	8.3	1.4		
7440-48-4	COBALT	1	5.3	1.4		
7440-50-8	COPPER	1	12	1.4		
7439-89-6	IRON	1	17000	14		
7439-92-1	LEAD	1	15	0.42		
7439-95-4	MAGNESIUM	1	7900	140		
7439-96-5	MANGANESE	1	210	1.4		
7440-02-0	NICKEL	1	15	2.8		
7440-09-7	POTASSIUM	1	1400	140		
7782-49-2	SELENIUM	1	0.99	0.7		
7440-22-4	SILVER	1	1.4	1.4	U	
7440-23-5	SODIUM	1	140	140	U	
7440-28-0	THALLIUM	1	1.4	1.4	U	
7440-62-2	VANADIUM	1	19	1.4		
7440-66-6	ZINC	1	63	2.8		

Data Package ID: IT0310132-2

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Total ICP Metals

Method SW6010

Sample Results

Lab Name: Paragon Analytics, Inc.

Work Order Number: 0310132

Client Name: URS Operating Services, Inc.

Client Project ID: Rico Argentine 36547730

Field ID: RA-SD-03
Lab ID: 0310132-2

Sample Matrix: SEDIMENT
% Moisture: 34.9
Date Collected: 17-Oct-03
Date Extracted: 27-Oct-03
Date Analyzed: 28-Oct-03

Prep Batch: IP031027-2
QCBatchID: IP031027-2-3
Run ID: IT031028-1A1
Cleanup: NONE
Basis: Dry Weight

Sample Allquot: 1g
Final Volume: 100ml
Result Units: mg/kg
Clean DF: 1
File Name: TS31028

CASNO	Target Analyte	Dilution Factor	Result	Reporting Limit	Result Qualifier	EPA Qualifier
7429-90-5	ALUMINUM	1	7500	31		
7440-36-0	ANTIMONY	1	3.1	3.1	U	
7440-38-2	ARSENIC	1	12	1.5		
7440-39-3	BARIUM	1	120	15		
7440-41-7	BERYLLIUM	1	0.77	0.77	U	
7440-43-9	CADMIUM	1	1.1	0.77		
7440-70-2	CALCIUM	1	16000	150		
7440-47-3	CHROMIUM	1	8.9	1.5		
7440-48-4	COBALT	1	6.9	1.5		
7440-50-8	COPPER	1	32	1.5		
7439-89-6	IRON	1	20000	15		
7439-92-1	LEAD	1	72	0.46		
7439-95-4	MAGNESIUM	1	6100	150		
7439-96-5	MANGANESE	1	460	1.5		
7440-02-0	NICKEL	1	15	3.1		
7440-09-7	POTASSIUM	1	1500	150		
7782-49-2	SELENIUM	1	1.2	0.77		
7440-22-4	SILVER	1	1.5	1.5	U	
7440-23-5	SODIUM	1	150	150	U	
7440-28-0	THALLIUM	1	1.5	1.5	U	
7440-62-2	VANADIUM	1	20	1.5		
7440-66-6	ZINC	1	180	3.1		

Data Package ID: IT0310132-2

Date Printed: Monday, November 03, 2003

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Total ICP Metals

Method SW6010

Sample Results

Lab Name: Paragon Analytics, Inc.

Work Order Number: 0310132

Client Name: URS Operating Services, Inc.

ClientProject ID: Rico Argentine 36547730

Field ID: RA-SD-04

Lab ID: 0310132-3

Sample Matrix: SEDIMENT

% Moisture: 43.3

Date Collected: 17-Oct-03

Date Extracted: 27-Oct-03

Date Analyzed: 28-Oct-03

Prep Batch: IP031027-2

QCBatchID: IP031027-2-3

Run ID: IT031028-1A1

Cleanup: NONE

Basis: Dry Weight

Sample Aliquot: 1 g

Final Volume: 100 ml

Result Units: mg/kg

Clean DF: 1

File Name: TS31028

CASNO	Target Analyte	Dilution Factor	Result	Reporting Limit	Result Qualifier	EPA Qualifier
7429-90-5	ALUMINUM	1	8800	35		
7440-38-0	ANTIMONY	1	3.5	3.5	U	
7440-38-2	ARSENIC	1	19	1.8		
7440-39-3	BARIUM	1	140	18		
7440-41-7	BERYLLIUM	1	0.88	0.88	U	
7440-43-9	CADMIUM	1	3.7	0.88		
7440-70-2	CALCIUM	1	24000	180		
7440-47-3	CHROMIUM	1	11	1.8		
7440-48-4	COBALT	1	8.2	1.8		
7440-50-8	COPPER	1	100	1.8		
7439-89-6	IRON	1	27000	18		
7439-92-1	LEAD	1	390	0.53		
7439-95-4	MAGNESIUM	1	9700	180		
7439-96-5	MANGANESE	1	920	1.8		
7440-02-0	NICKEL	1	18	3.5		
7440-09-7	POTASSIUM	1	1900	180		
7782-49-2	SELENIUM	1	1.7	0.88		
7440-22-4	SILVER	1	3.8	1.8		
7440-23-5	SODIUM	1	180	180	U	
7440-28-0	THALLIUM	1	1.8	1.8	U	
7440-62-2	VANADIUM	1	23	1.8		
7440-66-6	ZINC	1	590	3.5		

Data Package ID: IT0310132-2

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Total ICP Metals

Method SW6010

Sample Results

Lab Name: Paragon Analytics, Inc.

Work Order Number: 0310132

Client Name: URS Operating Services, Inc.

Client/Project ID: Rico Argentine 36547730

Field ID: RA-SD-05

Lab ID: 0310132-4

Sample Matrix: SEDIMENT

% Moisture: 26.6

Date Collected: 17-Oct-03

Date Extracted: 27-Oct-03

Date Analyzed: 28-Oct-03

Prep Batch: IP031027-2

QCBatchID: IP031027-2-3

Run ID: IT031028-1A1

Cleanup: NONE

Basis: Dry Weight

Sample Allquot: 1g

Final Volume: 100 ml

Result Units: mg/kg

Clean DF: 1

File Name: TS31028

CASNO	Target Analyte	Dilution Factor	Result	Reporting Limit	Result Qualifier	EPA Qualifier
7429-90-5	ALUMINUM	1	9800	27		
7440-36-0	ANTIMONY	1	2.7	2.7	U	
7440-38-2	ARSENIC	1	15	1.4		
7440-39-3	BARIUM	1	67	14		
7440-41-7	BERYLLIUM	1	0.93	0.68		
7440-43-9	CADMUM	2	1.9	1.4		
7440-70-2	CALCIUM	1	8400	140		
7440-47-3	CHROMIUM	1	14	1.4		
7440-48-4	COBALT	1	7.9	1.4		
7440-50-8	COPPER	1	62	1.4		
7439-89-6	IRON	2	27000	27		
7439-92-1	LEAD	2	230	0.82		
7439-95-4	MAGNESIUM	1	7800	140		
7439-96-5	MANGANESE	1	630	1.4		
7440-02-0	NICKEL	1	17	2.7		
7440-09-7	POTASSIUM	1	1500	140		
7782-49-2	SELENIUM	2	1.4	1.4	U	
7440-22-4	SILVER	1	3.1	1.4		
7440-23-5	SODIUM	1	140	140	U	
7440-28-0	THALLIUM	2	2.7	2.7	U	
7440-62-2	VANADIUM	1	20	1.4		
7440-66-6	ZINC	1	550	2.7		

Data Package ID: IT0310132-2

Date Printed: Monday, November 03, 2003

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Total ICP Metals

Method SW6010

Sample Results

Lab Name: Paragon Analytics, Inc.

Work Order Number: 0310132

Client Name: URS Operating Services, Inc.

Client Project ID: Rico Argentine 36547730

Field ID: RA-SD-08

Lab ID: 0310132-5

Sample Matrix: SEDIMENT

% Moisture: 22.4

Date Collected: 17-Oct-03

Date Extracted: 27-Oct-03

Date Analyzed: 28-Oct-03

Prep Batch: IP031027-2

QCBatchID: IP031027-2-3

Run ID: IT031028-1A1

Cleanup: NONE

Basis: Dry Weight

Sample Aliquot: 1 g

Final Volume: 100 ml

Result Units: mg/kg

Clean DF: 1

File Name: TS31028

CASNO	Target Analyte	Dilution Factor	Result	Reporting Limit	Result Qualifier	EPA Qualifier
7429-90-5	ALUMINUM	1	5300	26		
7440-36-0	ANTIMONY	1	2.6	2.6	U	
7440-38-2	ARSENIC	1	7.9	1.3		
7440-39-3	BARIUM	1	41	13		
7440-41-7	BERYLLIUM	1	0.64	0.64	U	
7440-43-9	CADMIUM	1	13	0.64		
7440-70-2	CALCIUM	1	2900	130		
7440-47-3	CHROMIUM	1	7.3	1.3		
7440-48-4	COBALT	1	3.1	1.3		
7440-50-8	COPPER	1	52	1.3		
7439-89-6	IRON	1	16000	13		
7439-92-1	LEAD	1	980	0.39		
7439-95-4	MAGNESIUM	1	5300	130		
7439-96-5	MANGANESE	1	640	1.3		
7440-02-0	NICKEL	1	5.5	2.6		
7440-09-7	POTASSIUM	1	1100	130		
7782-49-2	SELENIUM	1	0.81	0.64		
7440-22-4	SILVER	1	6.4	1.3		
7440-23-5	SODIUM	1	130	130	U	
7440-28-0	THALLIUM	1	1.3	1.3	U	
7440-62-2	VANADIUM	1	13	1.3		
7440-66-6	ZINC	10	2000	26		

Data Package ID: IT0310132-2

Date Printed: Monday, November 03, 2003

Paragon Analytics Inc.

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Total MERCURY

Method SW7471

Sample Results

Lab Name: Paragon Analytics, Inc.

Client Name: URS Operating Services, Inc.

Client Project ID: Rico Argentine 36547730

Work Order Number: 0310132

Reporting Basis: Dry Weight

Final Volume: 100 ml

Matrix: SEDIMENT

Result Units: mg/kg

Client Sample ID	Lab ID	Date Collected	Date Prepared	Date Analyzed	Percent Moisture	Dilution Factor	Result	Reporting Limit	Flag	Sample Aliquot
RA-SD-01	0310132-1	10/17/2003	10/29/2003	10/30/2003	28.1	1	0.14	0.14	U	0.6 g
RA-SD-03	0310132-2	10/17/2003	10/29/2003	10/30/2003	34.9	1	0.15	0.15	U	0.6 g
RA-SD-04	0310132-3	10/17/2003	10/29/2003	10/30/2003	43.3	1	0.18	0.18	U	0.6 g
RA-SD-05	0310132-4	10/17/2003	10/29/2003	10/30/2003	26.6	1	0.14	0.14	U	0.6 g
RA-SD-06	0310132-5	10/17/2003	10/29/2003	10/30/2003	22.4	1	0.13	0.13	U	0.6 g

Comments:

1. ND or U = Not Detected at or above the client requested detection limit.

Data Package ID: HG0310132-2

WA 11/19/03

Date Printed: Monday, November 03, 2003

Paragon Analytics Inc.

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CYANIDE, TOTAL

Method SW9014

Sample Results

Lab Name: Paragon Analytics, Inc.
Client Name: URS Operating Services, Inc.
Client Project ID: Rico Argentine 36547730
Work Order Number: 0310132
Reporting Basis: As Received

Final Volume: 50 ml
Matrix: WATER
Result Units: mg/l

Client Sample ID	Lab ID	Date Collected	Date Prepared	Date Analyzed	Percent Moisture	Dilution Factor	Result	Reporting Limit	Flag	Sample Aliquot
RA-SW-01	0310132-8	10/17/2003	10/23/2003	10/23/2003	N/A	1	0.01	0.01	U	50 ml
RA-SW-03	0310132-8	10/17/2003	10/23/2003	10/23/2003	N/A	1	0.01	0.01	U	50 ml
RA-SW-04	0310132-10	10/17/2003	10/23/2003	10/23/2003	N/A	1	0.01	0.01	U	50 ml
RA-SW-05	0310132-12	10/17/2003	10/23/2003	10/23/2003	N/A	1	0.01	0.01	U	50 ml
RA-SW-06	0310132-14	10/17/2003	10/23/2003	10/23/2003	N/A	1	0.01	0.01	U	50 ml

Comments:

1. ND or U = Not Detected at or above the client requested detection limit.

Data Package ID: CN0310132-1

Date Printed: Wednesday, October 29, 2003

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CYANIDE, TOTAL

Method SW9014

Sample Results

Lab Name: Paragon Analytics, Inc.

Client Name: URS Operating Services, Inc.

Client Project ID: Rico Argentine 36547730

Work Order Number: 0310132

Reporting Basis: Dry Weight

Final Volume: 50 ml

Matrix: SEDIMENT

Result Units: mg/kg

Client Sample ID	Lab ID	Date Collected	Date Prepared	Date Analyzed	Percent Moisture	Dilution Factor	Result	Reporting Limit	Flag	Sample Allquot
RA-SD-01	0310132-1	10/17/2003	10/27/2003	10/27/2003	28.1	1	0.7	0.7	U	1g
RA-SD-03	0310132-2	10/17/2003	10/27/2003	10/27/2003	34.9	1	0.77	0.77	U	1g
RA-SD-04	0310132-3	10/17/2003	10/27/2003	10/27/2003	43.3	1	0.88	0.88	U	1g
RA-SD-05	0310132-4	10/17/2003	10/27/2003	10/27/2003	28.6	1	0.68	0.68	U	1g
RA-SD-06	0310132-5	10/17/2003	10/27/2003	10/27/2003	22.4	1	0.64	0.64	U	1g

Comments:

1. ND or U = Not Detected at or above the client requested detection limit.

Data Package ID: CN0310132-2

Date Printed: Friday, October 31, 2003

Paragon Analytics Inc.

LIMS Version: 4.221B

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